

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

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HEALTH DEPARTMENT
CITY HALL ANNEX

1917



HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Commissioner of Health.

Publications and Licenses				1107-1108 City Hall Annex
Medical Division				1107 City Hall Annex.
Communicable Diseases .				1107 City Hall Annex.
Child Hygiene				1108 City Hall Annex.
Health Unit				17 Blossom street.
Vaccination Station				17 Blossom street.
Detention Hospital				Southampton street.
Occupational Clinic				17 Blossom street.
		1		1101 00 11 11 4
Bacteriological Laboratory				1101 City Hall Annex.
Examination of Cultures .	•			1101 City Hall Annex.
Wassermann Tests			٠	1101 City Hall Annex.
Food Inspection Division	14.			1110 City Hall Annex.
Inspection of Foodstuffs .				1110 City Hall Annex.
Examination of Milk and Vi				1104 City Hall Annex.
Inspection of Dairies .				1102 City Hall Annex.
Brighton Abattoir				Market street, Brighton.
Sanitary Inspection Divisio	n			1111 City Hall Annex.
Abatement of Nuisances .				1111 City Hall Annex.
Examination of Gasfitters				1111 City Hall Annex.
23Additination of Gashiovers		•		1111 City Hall Hillion.
Vital Statistics				1112 City Hall Annex.
Permits for Burial				1112 City Hall Annex.
Superintendent of Peddlers				27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 11 p. m., inclusive, Sundays and holidays, for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

May 23-1919

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

Francis X. Mahoney, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, BULLETIN OF THE HEALTH DEPARTMENT, BOSTON.

VOL. 6.

BOSTON, JANUARY, 1917.

No. 1

Without health life is a dull existence.

DIPHTHERIA DEATHS AND THE USE OF ANTI-TOXIN.

During the year 1916 in this city there were 2,409 cases of diphtheria reported and 185 deaths. Of these 2,409 cases, 458, with 52 resulting deaths, came to Boston hospitals from adjoining towns. Deducting these which do not properly belong to Boston there were 1,951 cases with 133 deaths, a mortality rate of 6.8 per cent. These 133 deaths were investigated and reports of the data could be obtained in but 115.

Most of the deaths were in young children.

44 per cent were under three years.

20 per cent from three to five years.

24 per cent from five to ten years.

12 per cent over ten years.

About two thirds were under five years and one third from five years up. About two thirds of the deaths occurred early in the disease. Following are the deaths for the first nine days:

- 2 occurred on the first day of the disease.
- 9 occurred on the second day of the disease.
- 13 occurred on the third day of the disease.
- 12 occurred on the fourth day of the disease.
 - 5 occurred on the fifth day of the disease.
- 7 occurred on the sixth day of the disease. 11 occurred on the seventh day of the disease.
- 10 occurred on the eighth day of the disease.
- 4 occurred on the ninth day of the disease.

Antitoxin is the one curative agent in diphtheria. This is admitted by practically all medical practitioners. A study of the statistics of the rate of mortality before using this agent and the results obtained since its widespread use would readily convince the most skeptical. It is of great value in every period, but the greatest benefit is obtained by its administration in the early stage of the disease. It should not only be given early but in sufficient doses. If the amount is too small, the value of the remedy is diminished; if its use is delayed the chances of recovery are greatly lessened.

A physician was called to attend on the 1st day of the disease in 22 cases. 2d day of the disease in 41 cases. 3d day of the disease in 17 cases. 4th day of the disease in 16 cases. 5th day of the disease in 4 cases. 6th day of the disease in 3 cases. 7th day of the disease in 3 cases. 8th day of the disease in 2 cases. 9th day of the disease in 2 cases. Not known, 5 cases.

Total, <u>115</u> cases.

Antitoxin was given on the

1st day of the disease in 8 cases.

2d day of the disease in 29 cases.

3d day of the disease in 34 cases.

4th day of the disease in 15 cases.

5th day of the disease in 5 cases.

6th day of the disease in 8 cases.

7th day of the disease in 6 cases.

8th day of the disease in 3 cases.

9th day of the disease in 2 cases.

Antitoxin was not given in 5 cases.

Total, 115 cases.

In two of the cases where antitoxin was not given diphtheria was discovered at autopsy.

The physician on being called gave antitoxin or sent case to hospital on the

1st day of attendance in 51 cases.

2d day of attendance in 42 cases.

3d day of attendance in 9 cases.

4th day of attendance in 2 cases.
5th day of attendance in 2 cases.
6th day of attendance in 2 cases.
7th day of attendance in 1 case.
8th day of attendance in 1 case.
No antitoxin in 5 cases.

Total, 115 cases.

In 51 of these cases the disease was recognized as diphtheria at once. Immediate action was taken by the physician by administering antitoxin or sending the patient to the hospital for appropriate treatment. The disease was recognized at once from the clinical symptoms. The prompt action of the physicians shows that every effort was made to preserve the patients' lives. In 5 of these 51 cases the disease was either so far advanced when the physician called that antitoxin was of no avail or else it was of such severity that no treatment could be of any service. In fact, in most of these 51 cases the parents had delayed too long before calling a physician. The sickness was too far advanced for any medical treatment to be of value.

In 42 cases antitoxin was not given until the second day of the physician's attendance. In most of these cases the delay was either due to inability to make a clinical diagnosis at once or a culture was sent to the laboratory and treatment delayed until the bacteriological result was determined. disease may not have developed sufficiently and the signs not clear enough to make a positive diagnosis. In some cases the influence of the family prevented the physician from giving antitoxin at once: he was asked to wait until the disease was more pronounced or until the bacteriological examination had been made. Again, many physicians do not like to give antitoxin, fearing they may be wrong in their diagnosis and do not like to cause pains or discomfort to the patient, and also on account of the possible serious results to the patient from hypersensibility or anaphylaxis, or to the discomforts from urticaria and pain in joints that occasionally follow its use. The fear that these results may be brought upon patients who do not have diphtheria prevents many physicians from using antitoxin until the diagnosis is made with certainty. No satisfactory information was obtained in regard to the amount used in the initial dose. No conclusions can be drawn as to whether the amount was too small to be of value.

In nine instances the physician did not give antitoxin until the third day of his attendance and in eight cases the physician had visited the case from four to eight days before giving antitoxin. In these seventeen instances antitoxin was evidently given too late for the greatest benefit to be obtained.

In five cases antitoxin was not given at all, a wrong diagnosis presumably being made. Two of these were discovered to be diphtheria at autopsy.

The conclusion seems reasonable that a certain reduction in the mortality from diphtheria might be obtained by the earlier use of antitoxin. If the clinical appearances are so suspicious that diphtheria seems probable antitoxin should immediately be given without waiting for further development of the disease or for laboratory diagnosis. Of course, in every case of a suspicious throat a culture should be taken, but when the physician's judgment balances to the diagnosis of diphtheria then antitoxin should be given at once, at the time the culture is taken. The inconveniences caused by antitoxin in a case that happens not to be diphtheria are not to be compared with the serious if not fatal results that might ensue from delay in its administration.

Dosage of Antitoxin in Diphtheria.

The attention of physician readers is again called to the following table of the doses of antitoxin recommended in the treatment of diphtheria. The table was prepared by Dr. W. H. Park of the New York Health Department on the basis of extensive experimental and clinical studies. The recommendations have been indorsed by the Medical Board of the Willard Parker Hospital and by the diagnosticians of the Bureau of Preventable Diseases, and this has become part of the general department procedure. There is no advantage in excessive or repeated doses.

Dosage of Antitoxin in Diphtheria.

	Mild Cases.	Moderate.	Severe.	Malignant.
Infants, 10 to 30 pounds in weight (under 2 years of age)	$\begin{cases} 2,000 \text{ units} \\ \text{to} \\ 3,000 \text{ units} \end{cases}$	3,000 units to 5,000 units	5,000 units to 10,000 units	10,000 units
Children, 30 to 90 pounds in weight (under 15 years of age)	$\begin{cases} 3,000 \text{ units} \\ \text{to} \\ 4,000 \text{ units} \end{cases}$	4,000 units to 10,000 units	10,000 units to .15,000 units	15,000 units to 20,000 units
Adults, 90 pounds and over in weight	3,000 units to 5,000 units	5,000 units to 10,000 units	10,000 units to 20,000 units	20,000 units to 40,000 units

Cases of laryngeal diphtheria, moderate cases seen late at the time of the first injection and cases of diphtheria occurring as a complication of the exanthemata should be classified and treated as "severe" cases.

In all cases a single dose of the proper amount, as indicated in the schedule, is recommended. For immunizing purposes a dose of 1,000 units should be used.

It is recommended that the methods of administration be as follows:

Mild Cases.—Subcutaneous or intramuscular.

Moderate Cases.— Intramuscular or subcutaneous.

Severe Cases.—Intramuscular or subcutaneous or intravenous.

Malignant Cases.— Intravenous.

DUST AND DISEASE.

Coughing, spitting and sneezing are methods by which the living tuberculosis germs are scattered about by the million. When sputum is on the sidewalk it is very easily carried into the homes on the soles of shoes. Dry sputum drops from the handkerchiefs, soiled clothing, such as coat sleeves, lapels, pillow cases and sheets. The hands are frequently soiled with sputum that may be harmful. Cows' milk occasionally contains bacilli from cows that have the disease. The urine and feces of tuberculosis patients and the discharges from tubercular sores may occasionally spread the disease.

Food, and especially that of the infant, is easily contaminated if the mother or cook is careless about the disposal of sputum.

It is probable that the majority of cases of tuberculosis are contracted through direct contact with careless consumptives or with articles which they have recently handled.

But some of the infections may be caused by the dried sputum which is often mixed with the dust of a room and may be inhaled through the mouth or the nose, by swallowing the dust or by eating food that may be contaminated, and by inoculation into cuts or scratches and through the gums.

The streets are filled with dirt and dust particles and dry sweeping is dangerous. Especially after the winter's snow and ice there is an accumulation of dirt and dust that cannot easily be removed. This material, if not directly the cause of tuberculosis, irritates the lungs of those that inhale it and renders them more susceptible to the disease.

An examination made not long ago of street dust in New York by the public health committee of the New York Academy of Medicine and the results announced by Professor Hastings of the Cornell Medical School may be regarded as representing the best thought upon this subject. The conclusions were:

- 1. Numerous bacteriological examinations made in this city, as well as elsewhere, show that street dust contains a variety of living pathogenic organisms such as tubercle bacilli and various types of streptococci which are recognized as causative agents of many respiratory and other diseases.
- 2. Although there exist only a very few positive instances where the production of disease can be traced directly to pathogenic bacteria present in dust, yet the fact that these organisms are found in appreciable numbers in street dust and are inhaled or ingested establishes a presumption that street dust may at times be a cause of disease.
- 3. Studies with reference to the incidence of certain respiratory diseases show that persons free from exposure to city dust are less liable to suffer from these diseases than those so exposed.
- 4. Dust has, for a long time, been universally recognized as an injurious mechanical irritant and as a cause of lowered bodily resistance, and one of the first prerequisites of public health has been the elimination of dust as far as possible.
- 5. Dry sweeping should be entirely abandoned. An adequate system of street flushing should be introduced in street cleaning procedures of our cities and efforts should be made to apply all available means to make the streets as free from dust as possible.

In this connection the efforts of the Mayor to minimize this danger are worthy of note in that he has recommended to the Commissioner of Public Works the constant and thorough flushing of all the hard paved streets in the city.

The services of the Fire Department have been enlisted, and the firemen will flush down the streets with heavy streams of water from hose attached to the city hydrants. All street flushing and scrubbing machines in the city service will be pressed into service, including all automobile trucks under contract, and all available employees of the Public Works Department will be at work in the streets with scrapers and brushes to flush into the city catch-basins the accumulations of filth and dirt of the winter. In the spring this cleansing process will be extended to all catch-basins in the city.

This work of flushing the streets will begin just as soon as the weather permits. It cannot be done while there is much hard snow and ice in the streets, but a wait of a few days or maybe a week will be more than made up when conditions are more suitable.

Now is the time to begin the 1917 fly swatting. Kill them before they breed.

CASE OF SMALLPOX IN BOSTON.

The first case of smallpox for the year 1917 was found February 10 in the office of a Boston physician where the man had called for treatment.

The patient is twenty-seven years of age, a delegate for a labor union, and came from Waterbury, Conn., February 4, and went to Cambridge, where he has been living. On February 5 he complained of being ill but did not consult a physician until the latter part of the week when he came to Boston.

His case was diagnosed as smallpox and the Health Department notified. The diagnosis of smallpox was confirmed and the man immediately removed to the Detention Hospital of this department.

All necessary precautions have been taken by this department and also by the Cambridge department.

VACCINATION.

It should hardly be necessary to again call to the attention of the public the danger that oftentimes lies about them. The above case came from a city where smallpox has been prevalent for some time and although most of the cases there are of a mild type they are, nevertheless, infectious and may be passed on to others in a more severe form. Vaccination is the only protection against smallpox and this department is willing and ready at all times to give vaccination without any charge.

Legislators in this state might also bear in mind that the annual "anti-vaccination bill" has again bobbed up and is known as House Bill 1489. Physicians and laymen in this Commonwealth should do everything in their power to have their representatives vote against this bill, and especially now when it comes before the committee.

HEALTH AIDS.

Although there were many circumstances which helped materially in many cases to keep mortality and morbidity rates up during the year just passed, on the whole, we may well be thankful for the good results that accrued.

The public is awakened to the fact that they can help keep disease and death away if a little care and caution is used. Each person should try to be an educator in his own way to help his neighbor keep up his health and with each one helping the other we have a public health campaign that cannot fail to produce excellent results.

The Press of the city is giving much space to health articles and its value cannot be overestimated. The work done along these lines by the newspapers of this city has done much in improving living conditions, helping legislation, besides assisting the department in its efforts to educate the people in the simple rules of care and prevention. The courts of the Commonwealth also recognizing the efforts of health educators in all parts of the country to promote and protect the health of the people have been of material aid in punishing offenders for violations of the health laws and the newspapers have worked with them in the publicity they have given such cases as have come before the courts. The reporting of all cases of communicable disease by the physicians in this city with a resultant immediate quarantine by the physicians of this department has also added to the sum total of general assistance rendered.

With these powerful assistants working in harmony toward the protection of the public and the promotion of the public health it is hoped that the coming year will be fruitful of even better results than have already been accomplished.

PREVENTION OF ILLNESS.

In order to keep our bodies well it is necessary that they be kept as strong and as sound as it is possible for us to make them.

Wholesome food, fresh air, pure water, rest, exercise, sleep, personal cleanliness and good habits are essential in order to successfully avoid disease.

We should eat sufficient food to properly maintain our bodies; too little weakens and too much results in an accumulation of fat. Neither is beneficial. The kind of work we do and the season of the year should regulate the quantity of food. Meat, fat, sugar, starch, salt and water form part of the human body and are needed for its upkeep. A mixed diet is always best and the plainer the food the better will be our health.

Fresh air is needed both day and night, and if you keep out of doors as much as possible and get a plentiful supply at nighttime you will be helping yourselves. Keep your home and your office ventilated so that they will receive a constant supply of fresh air. Breathe all the fresh air you can.

Pure water is necessary for our bodies. Luckily in this city we have a good water supply. It is when we leave the city, even for only a day or two, that we forget and become careless. Be sure that the water you drink does not come from a well near a privy even though it looks clear and sparkling. In connection with drinking water outside your home, an individual drinking cup is always preferable and safer.

A tired body is not able to resist disease as well as a rested body. No matter whether you work hard with body or mind rest is necessary. If irritable, distressed or tired lie down for awhile or go to bed.

Impurities of the body pass out from it through the pores of the skin to a considerable extent. Hot water and soap are good cleansers and cheap. A daily shower is very helpful and for those who are able to withstand it a cold shower every day in the year is most beneficial. For those who cannot stand the rigors of a cold shower, bathe as often as possible in warm water. Keep your bodies, hands, nose, mouth, nails and clothing free from dirt. Your skin and underwear should at all times be clean.

Keep away from those that have contagious disease of any kind, and if there should be a case in your own household keep it properly quarantined.

Vaccination is a prevention against smallpox and antityphoid serum against typhoid fever. The Health Department will at all times give free vaccination.

The common cold is infectious, easy to get and easy to carry and pass on to others. Keep your body in the best physical condition and you will ward off colds. Now is the season of the year when care is necessary. Use your handkerchief and probably you will encourage others to use theirs.

PROTECTION OF FOODSTUFFS.

For the past year and a half the inspectors of the Food Division of the Health Department have been paying particular attention to see that the regulations for the covering of foodstuffs are not violated. These regulations have been indorsed by the State Department of Health and are made by virtue of the provisions of the Acts of 1912, chapter 448. Several of the violators have been brought to court and fined. Particular attention has been given to those parties who have been transporting meats from place to place in the city, and

also to those who have been exposing meats and fish in tanks and barrels on the sidewalk. The ideal vehicle for transporting meats and foodstuffs through the streets would be a covered van, but lacking this, the department has insisted on these foodstuffs being protected from dust, flies and animals. In this connection the inspector in charge of the local office of the United States Bureau of Animal Industry has issued the following instructions to the Federal inspectors:

Instructions Regarding Wagons Used for Transporting Loose Meats.

All wagons used for transporting loose meats between official establishments, including those under market inspection, shall be kept clean and sanitary.

All meats carried on wagons or automobiles shall be covered, sides, ends and top, with canvas or other clean material. Pieces of burlap thrown over part of the meat will not be considered a covering.

The loading of meats so that shins and legs project from the front of the wagon, exposing the meats to dust, rain, snow, horses' tails, drivers' feet, etc., is forbidden. Meats so carried will not be allowed entrance to official establishments.

All drivers and men handling meats shall wear clean outer garments.

You will personally notify all proprietors or managers of official houses, including those under market inspection, under your supervision of these orders and inform them that they will be strictly enforced.

CLEANING OF RESTAURANTS.

Most persons when they enter a restaurant or eating place of any kind think but little of the conditions under which the food is prepared and cooked. This is a matter of much importance, and, happily, proprietors are waking up to the fact that the public is anxious for cleanliness in eating places.

The public should take great interest in this matter inasmuch as almost everyone has occasion to eat in public eating houses occasionally, not to mention the countless numbers that do not live at home, and must of necessity patronize such places for all meals.

Of the fewer restaurants that are beginning business the exterior and main dining rooms are spotless, and, in fact, every

thing in evidence is scrupulously clean. It is known that the public wishes cleanliness, especially when they pay for it, and also many places are competing for trade.

It is, of course, often noticed that finger bowls are simply filled and refilled after each service and never cleaned. Often soiled napkins are used to wipe off dishes before a person is served. These may appear of little consequence, but at the same time, maybe, are indicative of graver insanitary practices taking place in the kitchen.

It is in the kitchen where the real evil lurks; very little attention is paid to this place, where the public never has access. The kitchen should have the latest sanitary equipment; personal cleanliness and clean habits of employees as well as extreme care in the preparation of foodstuffs should be in evidence. The kind of food purchased by the proprietor and served to his patrons is entirely up to the proprietor himself; it is a personal matter and a matter of business with him.

If he chooses to serve poor, cheap food and food that is unwholesome and improperly prepared, his business will soon vanish. Good, pure food served under most hygienic conditions is the best advertisement for any eating place. Trade follows such a reputation.

BABY SHOW AT HEALTH UNIT.

During the month there was held at the Unit on Blossom street the first baby show of the year and the number of mothers and children in attendance and the interest and enthusiasm displayed was sufficient evidence of its success and augured well for future exhibitions of the same nature.

All the associations housed in the Unit assisted in making the show a successful one, and the nurses, doctors and visitors worked hard and long in arranging, weighing, measuring and registering the babies entered in the show. The age limit was five years and there were four classes; for a boy and a girl under two, under three, under four and under five.

After the prizes were awarded the children were arranged, pictures taken and instructions given the mothers as to the proper care and feeding of children. After each individual weighing the doctor spoke to the mothers in regard to each child with advice as to proper feeding. Literature in the language spoken by the mothers was distributed, and inasmuch

as other shows will be held it is probable that the mothers will profit by the instructions and have their children in even better condition than they were at this show.

There is no question but that shows of this kind will tend to assist mothers in bringing up their babies and do much toward improving general health conditions not only of the baby, but the home and the district in general.

Much praise is due the workers in this the only Unit of its kind in the city for their unfailing kindness and courtesy toward the great cosmopolitan element in this district, and their patience with each and every case that comes to their attention shows at least some results when so many mothers will bring their babies to an affair such as has just been held.

It shows further that the people of the district are keenly interested and aroused and are willing to listen to the advice of those working for their benefit and aim to profit by it.

In this section of the city where the nationalities are many it is gratifying to learn of good results and it is hoped that when other units are established in other sections of the city the people in those districts will gain as much by the efforts of health workers and the public Press as have the people of the West End section of the city.

OCCUPANCY OF BASEMENT ROOMS IN BOSTON.

Since the passage of the special legislative acts in regard to basement rooms in Boston the Health Department has been active in the enforcement of their provisions. The original act was adopted in 1914 and it was amended in 1915 (chapter 346).

Up to February 1, 1917, 901 basements had been examined; and in every case reports on existing conditions have been made, and plans giving the measurements, etc., in detail, have been executed and are on file.

A total number of 389 basements have been vacated by order of the Health Commissioner. The department has permitted the continued occupancy of 289 basements where the defects were merely insufficient window area or where the distance from the tops of windows to ceilings exceeded 6 inches.

This means that 678 basement cases have been finally disposed of.

There are 223 basements on which final notices have been served and the police officers of the department are in charge of these cases. All of these basements will either be vacated within a short time, or the rooms rearranged or altered so that they will comply with the law.

In connection with the enforcement of this law the department has been compelled to prosecute thirty owners, and the courts have imposed fines aggregating \$450 on the persons brought to trial.

VACATION AND EFFICIENCY.

Modern efficiency methods demand that during the working period all the faculties and all the energies be taxed to the utmost, that there should be no waste either of material or of energy, but that the vital forces should be given up entirely to the needs of the particular work in hand. The aim is an efficiency of effort and production.

But merely to train an individual to separate himself from all his vitality in behalf of an endeavor is not conducive to a collective efficiency. It must be the aim of the efficiency advocate and of the efficiency method to train a people or a class to utilize, but not to wear out their faculties. The best must not be consumed in an attempt to secure a high degree of efficiency, for the consumption of the individual becomes a rapid one, and the difficulty of replenishment greater all the Much of the technic of the efficiency expert must be directed toward the producer — to make him a more efficient human being and to prolong the period of his maximum capabilities. The efficiency must be of the producer first, and of the product last. Production must be regulated for speed, so that no one will be required to speed up beyond endurance. The aim of efficiency must be, moreover, in the collective sense to find an opportunity not only for the most gifted, but for everyone to exercise the energies with which he is endowed, no matter how small.

The vacation systems, which have recently attained such popularity, are Nature's safety valves for the relief of the high pressure resulting from these methods. It is becoming recognized that a vacation period is necessary in order to put one into shape for another year's grind. The vacation should be the nearest approach to the simple life — when taken with that purpose in view. It is for this reason that the country with all its many inconveniences is so often chosen for the place of vacation. The vacation period allows the absorption and the elimination of the fatigue products from the system accumu-

lated in the pressure period of work. The longer the vacation, therefore, the better the subsequent work. Vacations are essentially regenerators and rejuvenators.

It is the change, really more than the rest, that is of so much value in a vacation. Besides the absorption of the fatigue products there is an opportunity given those functions which have remained inactive and sluggish, and even atrophic, to exercise and develop. It is a restoration of balance. For confined and sedentary workers, even hard and coarse country work is restful and invigorating. For indoor workers this sort of a vacation means a new lease on life. Very often a borderline case of tuberculosis is maintained a little longer above the line by a proper vacation. The increased tendency to arteriosclerosis and other degenerative conditions, as well as premature senility, nearly all the result of high pressure and efficiency, can be much neutralized by periodic vacations, a vacation free from the grind, of course, but also from the worry incident thereto. The vacation is a therapeutic measure come to stay.

[New York Medical Journal.

PROPOSED MILK LEGISLATION.

Two bills dealing with the subject of pasteurization of milk are now before the joint committee on health and agriculture, and these measures deserve serious consideration by the members of these committees. One of these measures defines pasteurized milk as "Natural cow's milk not more than seventy-two hours old, subjected to a temperature not less than one hundred and forty degrees nor more than one hundred and forty-five degrees Fahrenheit and kept at such temperature not less than thirty minutes and immediately cooled therefrom to a temperature of 50 degrees Fahrenheit or lower."

Boards of health of cities and towns are authorized to require the pasteurization of any or all milk.

The other bill delegates the right to boards of health of cities of a population of 50,000 or more, to prohibit the sale of milk which has not been pasteurized, whenever in the opinion of the Board such prohibition is necessary and expedient for the public good. Authority is also delegated to such boards of health to make rules and regulations for the pasteurization, sale and distribution of milk. The state should give official sanction to the pasteurization of this product, as it offers a dependable means of further safeguarding public health.

Two measures are also before the General Court involving the issue of milk standardization. One reduces the quantity of milk solids from the present "not less than twelve and fifteen hundredths per cent" to 12 per cent; and the other lowers the now legal quantity of fat of "not less than three and thirty-five hundredths per cent" to 3 per cent. Coupled with the very recent increase in the price of milk, it is not believed that consumers will tolerate any lowering of quality. There is no necessity for the changes suggested, and their adoption would give unscrupulous milkmen an opportunity for tampering with milk, which would not be neglected. If the prevailing standards are to be changed, there should be no reduction of either milk solids or fat, but the fat content should be increased to at least three and six tenths per cent.

REGULATIONS ON EXCLUSION AND READMISSION OF PUPILS.

All readmission to school of teachers and pupils excluded on account of communicable disease is authorized only upon the presentation of a certificate from the Health Department, its agent, or from the attending physician.

Some communicable diseases are not reportable, and consequently are not acted upon by the Health Department. In these cases certificates of attending physician will be accepted. All other cases will be readmitted only on recommendation of the school physician.

Periods of Exclusion.

Scarlet Fever.— No exclusion if the person exposed has had the disease; otherwise the minimum period of exclusion shall be one week.

Diphtheria.— No exclusion if the person exposed has been immunized and can furnish a certificate of two negative cultures acceptable to the school physician; otherwise the minimum period of exclusion shall be one week.

Smallpox.— No exclusion if the person exposed has had the disease or shows evidence of successful vaccination; otherwise the minimum period of exclusion shall be two weeks.

Typhoid Fever, Measles, Cerebrospinal Meningitis, Whooping Cough, German Measles, Chicken Pox, Mumps, Anterior Poliomyelitis.— No exclusion if the person exposed has had the disease; otherwise the minimum period of exclusion shall be two weeks.

Evidence of a previous attack of the above mentioned communicable diseases must be satisfactory to the school physician.

Pediculosis.— Children with pediculosis should not be allowed to attend school until heads are clean.

The period of exclusion for all communicable diseases not definitely specified shall be such as the school physician may decide in each case after consultation with the principal of the school.

The word "household" shall be interpreted to mean a family.

WILLIAM H. DEVINE, M. D.,

Director of Medical Inspection, School Department.

HOSPITAL FOR LEPERS.

The bill to provide a national hospital for the care of lepers and to prevent the further spread of this disease was recently passed by the National House of Representatives, and on the 25th of January was unanimously passed by the Senate.

The act authorizes the United States Public Health Service to select the site and have charge of the erection of the buildings.

Conditions concerning lepers in the various parts of the country were portrayed before the Senate Committee on Public Health and the testimony of experts was published in a volume of 200 pages.

MEETING OF THE MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH.

The annual meeting of the Massachusetts Association of Boards of Health was held at the Hotel Brunswick, Thursday, January 25, 1917.

There was a luncheon, business meeting, report of nominating committee and election of officers.

Dr. Donald B. Armstrong read a paper, "The Community Health and Tuberculosis Demonstration in Framingham," and Dr. Thomas F. Harrington presented another on "Industrial Health."

The following officers were elected:

President — Dr. Francis X. Mahoney of Boston.

First Vice President — Dr. John S. Hitchcock of Northampton,

Second Vice President — Mr. William S. Kirschbaum of New Bedford.

Secretary — Dr. Francis H. Slack of Boston.

Treasurer — Dr. Francis G. Curtis of Newton.

Executive Committee — Mr. William L. Young of Springfield, Mr. Charles W. Milliken of Barnstable, Mr. Fred A. Bates of Lowell, Dr. F. L. Morse of Somerville and Dr. Gardner T. Swarts of Providence.

DO YOU KNOW THAT

In the lexicon of health there is no such word as "neutrality" against disease?

SUMMARY OF RATES. Birth and Death Rates per 1,000 of Population, 1901–1916.

	1901-05.	1906–10.	1910-11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	25.7
Deaths (excluding stillborns)	18.75	17.88	17.08	16.17	16.10	15.76	16.06	16.7
Smallpox	.095	.0003	.001					
Measles	.124	.127	.107	.154	.105	.083	.053	.141
Scarlet fever	.153	.104	.107	.044	.105	.087	.106	.051
Diphtheria and croup	.387	.265	.180	.142	.212	.225	.291	.243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.090
Typhoid fever	.224	.160	.091	.079	.082	.088	.053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	.639	.605	.462
Diarrhea and enteritis (all ages)	1.112	1.033	1.139	.911	.837	.731	.711	.549
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.454
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.00

PULMONARY TUBERCULOSIS BY AGE PERIODS, 1916.

Age Periods.	Under 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	40 to 45 years.	45 to 50 years.	50 to 55 years.	55 to 60 years.	60 to 65 years.	65 to 70 years.	70 to 75 years.	75 to 80 years.	80 to 85 years.	Unknown.	Totals.	Grand Total.
Male Female	32 21	24 23	37 34	66 107	178 140	195 119	189 104	170 98	152 78	122 43	95 29	62 22		19 9	10 5	5	2		1,400 856	2,256

CASES REPORTED.

Pulmonary Tuberculosis, by Wards, 1916.

Wards.	Cases and Deaths.	January.	February.	March.	April.	May.	June,	July.	August.	September.	October.	November.	December.	Total.
1	Cases. Deaths. Cases.	1 1 1 1 5 7 7 3 3 5 5 20 3 3 5 5 7 7 5 1 1 8 8 8 3 2 2 2 1 1 1 3 3 3 3 1 1 5 2 2 2 1 1 1 2 2 4 4 1 2 2 3 3 3 1 1 1 1 2 2 3 3 3 1 1 1 1 1	6 4 4 4 1 7 7 2 2 2 8 8 1 1 1 1 5 7 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	45972263881266499267744405883299133662111524413311111111111111111111111111111	1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	642277421771867757742157767769510996147733399352261122222	2 4 8 2 2 7 7 3 5 3 1 1 2 6 3 3 5 5 6 0 4 9 5 5 0 1 4 5 6 6 2 2 8 8 3 2 2 3 5 5 1 9 1 8 2 2 2 1 5 1 1 2 2	4 2 1 0 1 9 5 3 3 5 3 5 3 4 4 4 4 2 0 4 4 7 7 1 5 5 1 4 4 6 6 3 3 3 5 5 1 1 1 1 2 2 2 4 6 6 1 5 1 6 6 1 4 4 1 1 3 4 6 6 3 3 5 3 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	35 33 34 41 14 36 81 13 77 66 22 77 73 31 11 22 66 14 33 33 33 31 42 22 10 10 10 10 10 10 10 10 10 10 10 10 10	34 9 5 8 8 2 2 6 6 8 3 2 3 8 6 5 7 7 9 9 2 2 1 5 9 9 10 4 4 11 16 6 15 11 1 1 5 3 9 3 5 4 4 7	6	7 4 1 1 2 2 6 6 3 3 3 2 2 2 4 7 1 9 6 1 6 1 1 1 2 2 5 5 5 1 1 4 4 6 6 2 2 7 7 3 3 3 3 3 4 4 1 1 5 5 3 3 3 3 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 8 8 7 3 3 5 5 7 7 1 1 2 7 7 9 20 3 3 6 6 2 2 4 4 7 7 7 1 1 1 6 5 5 7 7 7 1 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1	46 38 129 67 53 39 63 37 347 209 67 67 67 68 33 38 124 60 167 81 63 33 33 37 21 61 62 50 14 44 26 50 17 7 19 21 61 66 54 67 66 66 66 66
Nonresidents	Cases Deaths. Deaths.	92 92	217 101 6	162 .85 6	194 103 11	192 96 7	215 75 7	222 73 8	189 76 10	203 99 9	165 62 9	169 68 9	186 82 8	2,256 1,012 99
Totals	Deaths.	101	107	91	114	103	82	81	86	108	71	77	90	1,111

DO YOU KNOW THAT

Clean water, clean food, clean houses make clean, healthy American citizens?

PULMONARY TUBERCULOSIS.

Cases by Kind of House, Sanitation, Sleeping Arrangements, Sputum Reports and Hospital.

Spaca		CP	701 0	3 tt.	1161	110.	spre	CCI.					
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Totals.
Kind of House:				Ì									
Single	1	4	6	7	24	21	23	17	22	13	19	24	181
Two apartment	7	8	12	9	17	22	19	20	27	22	14	32	209
Three apartment	19	32	21	28	73	77	85	87	78	61	52	61	674
Four apartment	1		2		16	16	10	9	9	6	15	9	93
Hotel	1	1	1	1		3	2	1		1	1	2	14
Lodging houses	17	. 22	14	21	22	25	21	14	24	30	29	27	266
Institution	1	1	2	1		1	1	1	2	1	2	4	17
Basement	6	5	2	4			5	3	2	1	1		29
Not given	89	144	102	123	40	50	56	37	39	30	36	27	. 773
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Sanitation:													
Excellent	7	31	21	22	17	27	22	25	15	33	3	10	233
Good	39	60	37	59	67	52	54	55	63	53	18	27	584
Fair	49	65	59	55	55	70	73	61	68	43	59	71	728
Poor	11	12	12	15	12	18	16	16	23	15	57	52	259
Very poor	1		1		1	2		1	3	3	9	14	35
Not given	35	49	32	43	40	46	57	31	31	18	23	12	417
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Separate Room:													
Yes	80	127	86	120	110	122	126	128	127	99	96	114	1,335
No	32	38	44	40	40	45	42	26	44	28	45	47	471
Not given	30	52	32	34	42	48	54	35	32	38	28	25	450
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Separate Bed:													
Yes	86	130	101	133	117	126	127	125	136	108	105	121	1,415
No	26	38	31	30	34	42	41	32	35	22	37	40	408
Not given	30	49	30	31	41	47	54	32	32	35	27	25	433
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Sputum:													
Positive	30	58	48	52	70	49	57	45	47	44	43	45	588
Negative	10	17	13	19	25	19	15	8	25	21	19	19	210
Ivegative	102	142	101	123	97	147	150	136	131	100	107	122	1,458
Not given	102			-			222	4.00	200	100	100	400	2,256
	142	217	162	194	192	215	222	189	203	165	169	186	-,
Not given		217	162	194	192	215	222	189	203	165	109	186	,,,,,,
Not given Totals					78						42		
Not given Totals Hospital:	142		66	107			80	58		57	42	68	

PULMONARY TUBERCULOSIS.

Cases by Sex, Condition, Color and Mother Nativity.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals,
Sex:													
Male	96	138	99	122	131	133	145	110	129	88	98	111	1,400
Female	46	79	63	72	61	82	77	79	74	77	71	75	856
Unknown													
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Conjugal Condition:													
Single	59	96	68	95	89	88	89	83	93	69	77	76	982
Married	57	75	65	62	63	79	84	70	66	64	60	82	827
Widowed	1	13	9	9	6	8	11	8	18	13	6	6	108
Divorced	4	1	1	1	2	1	3		2	1	1	2	19
Unknown	21	32	19	27	32	39	35	28	24	18	25	20	320
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Color:													
White	124	196	148	175	182	203	208	179	185	148	155	170	2,073
Chinese and black	9	9	7	12	10	12	14	10	12	7	3	6	111
Unknown	9	12	7	7					6	10	11	10	72
Totals	142	217	162	194	192	215	222	189	203	165	169	186	2,256
Mother Nativity:													
Boston	- 31	42	23	31	31	20	16	7	12	17	10	20	260
United States	19	30	20	25	24	26	25	18	26	14	18	18	263
Ireland	25	57	41	57	45	48	45	47	67	42	30	55	559
England, Scotland and Wales	8	7	4	9	10	6	8	1	9	7	7	7	83
Germany	3	3	5	3	4	3	8	6	3	1	7	3	49
Canada	10	17	11	17	15	19	22	20	15	24	15	13	198
Sweden	2	3	1	3	7	4	5	4	5	3	1	3	41
Italy	6	15	15	14	12	11	17	17	10	10	15	9	151
France			1	1		2					2		6
Russia	19	22	20	15	18	29	24	24	18	21	19	33	262
Other countries	11	15	12	13	15	15	11	18	14	6	29	20	179
	8	6	9	6	`11	32	41	27	24	20	16	5	205
Unknown													

REPORT OF THE HEALTH UNIT FOR THE MONTH OF JANUARY, 1917.

Health Department.

		aiti			une	Ht.				
Visits made by n	nedic	al in	spec	tor:						
Contagious.										95
Tuberculosis										3
Ophthalmia										18
Miscellaneous										16
TD / 1										100
Total .	٠	•	٠				•	•	٠	132
Cases visited by	nurse	es:								
Medical .										208
										465
Total .										673
Defective sanitar	w eor	ditio	ne f	ound	in t	anan	nent	hous	100	4
Calls by district	-								, ,	185
Cans by district	pily	Olail	1101	11 100	SUOIL		CILDE	vi y		100
Instruc	tive	Dist	rict	Nur	sing	Ass	ocia	tion	•	
Visits made by n	urses									621
	Baby									
Total number of										159
New babies admi										17
Babies readmittee										1
Conferences held										4
Total conference										230
Home visits by n	urses									307
Associate	d an	а на	hro	w E	adar	ntad	l Ch	ariti	i o c	
Cases investigate	ed an	d ass	isted	i.						22
Consu	mpf	ives,	Но	snit	а1 Г)ena	rtm	ent		
	III DU	IVUS	110	SULL	CLI L	- Da	LILLY	- III -		
Calls by nurses in	•			-		-				709

SUMMARY OF VITAL STATISTICS.

There were 1,153 deaths reported in the four weeks ending January 27, against 1,294 in the corresponding period last year, a death rate of 19.46 against 22.18.

Reported deaths of nonresidents numbered 162 against 167 last year.

Of deaths from	rej	ort	able	dis	sease	s t	he 1	princ	cipal	de	crea	ase
was:					•							
Whooping cough .												12
Diphtheria	·											6
Magalag							·				Ċ	4
Tuberculosis (all form	ns)											4
Scarlet fever												3
and the naincinal			~~~~									
and the principal												_
Anterior poliomyeliti Cerebrospinal mening												2 4
Other importan	t dif	fere	nces	wei	re as	fol	lows	3:				
Decreases:			•									
Erysipelas												4
Pneumonia .												82
Meningitis												5
Influenza												39
Premature birth												8
Bronchitis												11
Increases:												
Assidantal and mis	lent											7
Accidental and vic												97
Other causes .			٠	•	٠	٠	•	•	•	•	•	31
Other causes . There were 22	les	s d	eath.	s u	$_{ m nder}$	1						
Other causes .	les	s d	eath.	s u	$_{ m nder}$	1						
Other causes . There were 22 5 years, and 44	less	s d	eath ler 6	s u 0 y	nder ears.	1	yea	r, 1	44 le	ess	uno	der
Other causes . There were 22	less	s d	eath ler 6	s u 0 y	nder ears. WEE	1	yea	r, 1	44 le	ess	uno	der
Other causes . There were 22 5 years, and 44	less	s d	eath ler 6	s u 0 y	nder ears. WEE	1	yea	r, 1	44 le	ess PEI	uno	der
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths .	less	s d und HE	eath ler 6	s u 0 y 18	nder ears. WEE	1 KS	yea.	r, 1	14 le	PEI 7.	uno	der D 916. 294
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths . Nonresidents .	less	s d und HE	eath ler 6 FOU IN	s u 0 y 19	nder ears. WEE	1 KS	yea.	r, 1	191 1,15	PEI 7. 53	uno	der D 916. 294
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths . Nonresidents . Rate	less	s d und HE	eath ler 6 FOU IN	s u 0 y 191	nder ears. WEE	1 KS	yea	r, 14	191 1,18 16 19.4	PEI 7. 53 62 16	uno 1 1,	der D 916. 294 167
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonre	less R T	s dund	eath ler 6	s u 0 y 19 19 ted)	nder ears. WEE	1 KS	yea	r, 1	191 1,18 16 19.4 16.7	PEI 7. 53 32 46 73	1, 22 19	eD 916. 294 167 .18
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonred) Deaths under 1 year	less R T	s d und HE	eath ler 6	s u 0 y 18 19	nder ears. WEE	1 KS	yea	r, 14	191 1,18 16 19.4 16.7	PEI 7. 53 62 16 73	1, 22 19	916. 294 167 .18 .32
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonropeaths under 1 year Deaths under 5 years)	less R T	s d und HE	eath ler 6 FOU IN	s u 0 y 191	nder ears. WEE	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13	PEI 7. 53 66 73 87 707	uno 1, 22, 19	916. 294 167 .18 .32 159 251
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonred) Deaths under 1 year	less R T	s d und HE	eath ler 6 FOU IN	s u 0 y 191	nder ears. WEE	1 KS	yea	r, 14	191 1,18 16 19.4 16.7	PEI 7. 53 66 73 87 707	uno 1, 22, 19	916. 294 167 .18 .32
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonropeaths under 1 year Deaths under 5 years)	less R T	s dund	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13	PEI 7. 53 66 73 87 707	uno 1, 22, 19	916. 294 167 .18 .32 159 251
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonropeaths under 1 year Deaths under 5 years)	less R T	s dund	eath ler 6 FOU IN	s u 0 y 191	nder ears. WEE	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 66 73 87 707	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonropeaths under 1 year Deaths under 5 years)	less essider	s dund	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 32 46 73 37 70 70	uno 1 1, 22 19	916. 294 167 .18 .32 159 251
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonred peaths under 1 years) Deaths under 5 years Deaths over 60 years Anterior poliomyelitic Cerebrospinal mening	less RT	s dund	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 52 46 73 77 26 5	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the	less RT	s dund	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13 20 42	PEI 7. 553 52 46 73 77 76 6 117. 2 5 118	uno 1 1, 22 19	der D 916. 294 167 .18 .32 159 251 470
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the	less RT	HE CAU	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 66 73 77 76 61 77 78 78 78 78 78 78 78 78 78 78 78 78	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470
There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of th	less RT	HE CAU	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	191 1,18 16 19.4 16.7 13 20 42	PEI 7. 553 52 46 73 77 76 6 117. 2 5 118	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the	less RT	s d und	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	14 le 191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 66 73 77 76 6 17. 2 5 18 1 1	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470 916 1 24 5 4 1
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths	less RT	s d und	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	14 le 191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 32 46 73 37 76 6 11. 2 5 118 1 1 84	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470 916. — 1 24 5 4 1 87
Other causes There were 22 5 years, and 44 MORTALITY FO Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the	less RT	s d und	eath ler 6 FOU IN	s u 0 y 191	nder ears.	1 KS	yea	r, 14	14 le 191 1,18 16 19.4 16.7 13 20 42	PEI 7. 53 66 73 77 76 6 17. 2 5 18 1 1	uno 1 1, 22 19	der 916. 294 167 .18 .32 159 251 470 916 1 24 5 4 1

									1917.	1916.
Influenza									10	49
Septic sore throat.								٠.		1
Accidental and violent	;								83	76
Heart disease, endocar	diti	is, per	icar	ditis	and	nepl	ritis		241	244
Bronchitis					. •				14	25
Cancer									79	77
Diarrhea and enteritis	(ur	nder 2	yea	ars)					6	9
Diarrhea and enteritis	(2	years	and	love	er)				2	5
Erysipelas									5	9
Meningitis and enceph	alit	tis							2	. 7
Old age									2	3
Pneumonia									206	288
Premature birth .									33	41
Puerperal diseases									16	

The following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending January 30, 1917.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

	Tomar	Ciana	TOTAL	Dramera		Ionres	BIDENTS.			
	TOTAL	CABES.	TOTAL	DERIHS.	CAS	es.	DEATES.			
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.		
Diphtheria	258	229	18	24	57	40	5	8		
Scarlet fever	133	283	1	4	33	51		2		
Measles	292	239	1	- 5	4	4		-1		
Typhoid fever	7	8	3	3	1	6	2	1		
Whooping cough	11	234	1	13		15		1		
Tuberculosis (all forms)	231	193	93	97	17	3	13	-7		

CENTRAL DIVISION.

Legal notices authorized									536
Prosecutions authorized									7
Hearing									1
Premises ordered vacate	d								6
Miscellaneous orders							٠.		5
Applications Lying-in Ho	spit	al ap	prov	red					2
Forcible removals ordere									5
Stable permit granted									1
Permit to re-occupy					۰	٠			1

Licenses — Permits.

Grease license Vehicles inspected and approved Milk licenses Licenses to peddle fruit and vegetables Manicure — Massage Hen permits
Manicure — Massage
Han normits
Hen permits
Dump permits
Numbers assigned
License revoked
Undertaker appointed
Special drafts
Places assigned
Manure permits
MEDICAL DIVISION.
Communicable Diseases.
Number of visits by medical inspectors
Antitoxin given
Deaths investigated
Cases brought to Boston for treatment
Vaccinations
Vaccination certificates
Vaccinations
Public Health Nursing.
Communicable disease visits
TT 1 0 11 (10 1)
Number of revisits (mants)
Number of revisits (infants)
Total visits by nurses
Total visits by nurses
Total visits by nurses
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
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BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria

^{*}Examination of rats, 99; Genito-Urinary Tuberculosis, 5; Malaria, 6; Ophthalmia, 44; Lungs, 2; Marmalade, 1; Paratyphoid, 2; Septic, 1; Sputum, 1.

Sheep inspected	1
Swine inspected	5,535
Animals condemned, whole	5,538
Parts condemned	444
MILK	INSPECTION.
(Examinations as t	o Statute Requirements.)
Samples examined:	
Chemical examinations of milk	726
Bacteriological examinations of	milk
Bacteriological examinations of Chemical examinations of vineg	ar 43
Chemical examinations of butte	er and cheese 140
Bacteriological examinations of	ice cream
Number of court cases	
Fines	
Imposting of Durwick	ons — Articles Condemned.
The state of the s	
Meats and Fish:	Meats and Fish:
Poultry 210 poun	
Kidneys $2\frac{1}{2}$ pound	us tork 2 pounds
Beef 8 poun	1
Corned shoulder . 45 poun	A
Lamb 14 poun	
Hog 5 poun	
Pork chops 2 poun	
Meat scraps 5 poun	
Mulletts 88 poun	
Mackerel 11 poun	
Butterfish 35 poun	
Lobsters 9 poun	,
Smelts 4 poun	ds Prosecutions 20
Crab meat 5 car	
Corned beef 28 pound	ds
C A NIETE A DA	Y INSPECTION.
	3,191
New tenement house reports	
Legal notices recommended	
Legal notices recommended . Reinspections	536
Nuisances reported	4,500
Nuisances reported	
	·
Fines	\$ 133

There is abroad in the land a cynical feeling that a man must break some law of health in order to have a good time; that the hygienic life is a dull existence, that all the best things are forbidden. This is a superficial, admittedly foolish, reasoning.

— Eugene Lyman Fisk.

MONTHLY METEOROLOGICAL SUMMARY, JANUARY.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.) Mean, 29.99; highest, 30.55; date, 14; lowest, 5; date, 12.

TEMPERATURE.

Highest, 55; date, 14; lowest, 5; date, 12; greatest daily range, 40; date, 11; least daily range, 7; date, 15; normal for month, 27.0°.

PRECIPITATION.

Total this month, 2.82; snowfall, 13.6; greatest precipitation in 24 hours, 0.88; date, 5, 6; snow on the ground at end of month, 0.6; normal for this month, 3.82.

WIND.

Prevailing direction, west; total movement, 8,320 miles; average hourly velocity, 11.2; maximum velocity (for five minutes), 39 miles per hour, from southwest, on 14th.

WEATHER.

Number of days clear, 9; partly cloudy, 5; cloudy, 17; on which .01 inch or more of precipitation occurred, 12.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 8, 20, 25, 26, 31; lunar, 8; hail, 0; sleet, 12; fog, 0; thunderstorms, 0; frost: light, 0; heavy, 0; killing, 0.

FEBRUARY.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

			Population					760,400								
Births	٠			10		. * 19	,750	Bi	rth	rate						26.0
Deaths						. I	2,760	De	eath	rate						16.78
	Of	thes	е	total	d	leaths	14.1	per	cen	t wer	e :	non	resi	den	ts.	

* Estimated by Registry Department.

BOSTON HEALTH DEPARTMENT CITY HALL ANNEX 1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

PY.

Commissioner of Figures	Comm	issioner	of Health.	
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	Publications and Licenses .				1107-1108 City Hall Anne
	Medical Division				1107 City Hall Annex.
	Communicable Diseases				1107 City Hall Annex.
	Child Hygiene				1108 City Hall Annex.
	Health Unit				17 Blossom street.
	Vaccination Station				17 Blossom street.
	Detention Hospital				Southampton street.
	Occupational Clinic				17 Blossom street.
	Bacteriological Laboratory .				1101 City Hall Annex.
	Examination of Cultures				1101 City Hall Annex.
	Wassermann Tests				1101 City Hall Annex.
	Food Inspection Division .				1110 City Hall Annex.
	Inspection of Foodstuffs				1110 City Hall Annex.
	Examination of Milk and Vineg	ar	,		1104 City Hall Annex.
	Inspection of Dairies				1102 City Hall Annex.
	Brighton Abattoir				Market street, Brighton.
	Sanitary Inspection Division				1111 City Hall Annex.
	Abatement of Nuisances				1111 City Hall Annex.
	Examination of Gasfitters .			• ,	1111 City Hall Annex.
	Vital Statistics				1112 City Hall Annex.
	Permits for Burial				1112 City Hall Annex.
	Superintendent of Peddlers .				27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 11 p. m., inclusive, Sundays and holidays, for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

FRANCIS X. MAHONEY, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, BULLETIN

VOT. 6.

BOSTON, FEBRUARY, 1917.

No. 2

Life is not to live, but to be well.

BOSTON BABY CAMPAIGN, WEEK OF APRIL 15.

The rate of infant mortality is the best index of the progress of a country. So, in Boston, a very successful campaign for the reduction of deaths among infants is being made.

In connection with the Boston Baby Week Campaign during the week of April 15, there will be many exhibits, and a score of speakers will try to educate and impress upon the people the importance of care and health of the babies.

The Health Department has for years been active in its efforts to lower the infant mortality rate and has given its hearty support to every agency working to that end.

An effort is made to visit the home of every baby within three weeks of birth. At the first visit mothers are urged to nurse their babies. If artificial feeding is necessary the danger of using proprietary foods or medicines or something recommended by neighbors or friends is explained and mothers are advised to feed their babies on modified milk prepared according to a formula prescribed by a physician. Particular attention is also paid to the eyes of the newborn child. Subsequent visits are made at least once a month to all babies except those whose parents are well to do or are unusually well informed. On all visits the babies are weighed by the nurses. Sick babies are visited daily, whenever necessary, particularly during the summer months, and the Health Department will willingly send a physician to the home of any baby whose parents cannot afford a physician.

Great care must be taken, particularly in summer, in regard to the proper care and pasteurization of the baby's milk. Cleanliness should always prevail in feeding the baby or in the preparation of its food. It is estimated that in the United States one out of every eight babies born dies during its first year of life. It is conceded that at least one half of these deaths are preventable. It is also estimated that for every baby that dies, ten endure unnecessary sickness and many are handicapped for life through causes easily avoidable. Therefore, this department stands ready and eager, through its physicians and nurses, to help the mothers and the infants of the city in the campaign to spread the knowledge of health, cleanliness and care necessary to properly rear the child, for a baby saved is a citizen gained.

Anything that touches the life of children — that deals with the beginning of life — cannot help being hopeful. He who helps a child helps humanity with a distinctness which no other help given to human creatures can possibly give.

- Phillips Brooks.

THE INFANT OF TODAY IS THE CITIZEN OF TOMORROW.

(The following article is the first of a series of health articles to be written by medical men of the city for the public health department of the Massachusetts Federation of Women's Clubs. The purpose of the series is to arouse public interest in the baby month campaign to be conducted by the federation during April.)

Progress follows civilization, but baby saving has not kept pace with the advancement made generally in preventive medicine.

Until slightly more than a generation ago it seemed that civilization had entirely forgotten baby saving and progress had run roughshod over the infant.

Fortunately the subject has in recent years been presented in such a light that more than medical men and statisticians are interested; the public at large is now giving the matter the serious attention that it deserves, and no stone should be left unturned to catch up with the progress that has been made in other lines of public endeavor.

Today associations, organizations, clubs and health departments are devoting much time and effort and spending large sums of money to save the infant, and this spirit prevails especially in those communities where the citizens and local government are progressive, and where the welfare of the

individual is paramount. The results are striking and a marked reduction in infant mortality has followed wherever the public interest has been aroused.

The highest death rate among infants occurs during the first year, and it is during this period that our greatest effort should be made in baby saving.

A physician or a surgeon will go to almost any limit to save a human life, and this is of course most commendable, and it is also often evident to what extreme an individual will go to save the life of his fellowman, even though he jeopardize his own life.

With all this going on about us, the infant has been forgotten. Millions of babies have died seemingly unnecessarily because of ignorance, carelessness and neglect. It recalls conditions in the early ages when the infant was of but slight consideration, when it was deliberately left exposed to the elements or deformed or distorted, or as in China, where it was thrown over the Great Wall for disposal.

It is now realized full well that the infant of today is the citizen of tomorrow and this condition is brought forcibly and vividly to mind when we think of those countries across the seas that are being depopulated of their best and ablest citizens by the slaughter caused by modern warfare. The infant of today may be the savior of his country in a generation to come, and every effort should be made by the laity and the medical profession to save each infant born.

Baby saving is a wonderful and interesting work, the greatest that man can accomplish and worthy of his best endeavors.

Rulers and governments of foreign nations realizing the difficulty that confronts them through the loss of so many lives are redoubling their efforts to stimulate childbirth and to save babies. The situation has become grave not only in view of the fact that so many are being killed or maimed for life, but also because there is a constant decrease in the birth rate of the countries engaged.

This does not necessarily mean that more children are to be raised for war, to be slaughtered at the cannon's mouth, but it is due to a stern and growing realization that the child is father to the man, that he is needed in the years to come in the home, in the workshop, in the office, and in the business marts of trade; that something must be done to fill the places of those men and boys who have laid down their lives on the field of battle.

Children and baby saving in these countries has become as

serious a problem almost as the war itself. The governments looking further than the present war, looking into the future of the country, see that the future of all of these nations lies in the children that are born today.

Agencies in the city and state and all over the country engaged in this work of baby saving should be encouraged and assisted in every way possible to help reduce the high infant mortality rate that prevails in many parts of our land. While much splendid work has been done our energies should be increased twofold, yes a hundredfold, to maintain a steady and constant decrease in the number of infant lives lost annually.

Through Health Departments, Women's Clubs, Baby Welfare Associations and national and state organizations the work should be pushed to the greatest possible success. Let our efforts not be wasted; make them coöperative and harmonious, all working toward a common goal—the saving of infant lives. Let our voices reach every nook and corner of the state, into every household spread the gospel of baby saving, and where a child is to be born let our agencies send a word of education and enlightenment.

Pre-natal and post-natal work are productive of results, results that cannot be overestimated in their worth. Continue the work with renewed vigor, and this campaign of a month's duration should prove lasting in its effect on motherhood, on childhood, and the nation itself. Too many children pass away during the summer months, and a proper start at this time of the year will do much toward saving a large number of infants that otherwise might die. Let us remember the words of John Burns, who said, "Give me intelligent motherhood and good pre-natal conditions, and I have no doubt of the future of this or any other nation."

PRODUCTS IN BOSTON COLD STORAGE WARE-HOUSES MARCH 1, 1917.

Fish, 1,600,000 pounds, with the report of one cold storage warehouse missing.

Meats and meat product, 2,511,454 pounds, with the report of one cold storage warehouse missing.

Poultry, 2,882,174 pounds, with the report of one cold storage warehouse missing.

Butter, 2,000,232 pounds, complete report.

Eggs, 7,500 dozen, complete report.

Cheese, 140,834 pounds, complete report.

INSANITARY BASEMENTS.

A hearing was held before the Committee on Metropolitan Affairs of the Massachusetts Legislature on February 15 on Senate Bill 264—"An Act Relative to the Use of Basements in the City of Boston."

His Honor Mayor James M. Curley, with officials of the Health Department and officers of commercial and civic organizations, appeared before the committee.

The Mayor presented statistics in regard to the work done by the Boston Health Department toward the enforcement of chapter 346 of the Acts of 1915. He then made a strong appeal to the committee against the adoption of the proposed bill, and, in closing, made the following statement:

"Every person of intelligence knows that any space in which the sun does not enter or the air circulate can be but a foul breeding place. There is no reason why any property should be used to the detriment of the city or to the poor. Basement tenements are a thousand times worse than the loan shark evil, which we have eliminated so far as city employees are concerned. Any revision of the 1915 law would be a most serious backward step. The present high standard of our health laws should not be depreciated in any way, and, unless it can be definitely shown that any proposed change would prove of real benefit to general health and living conditions, your committee should refuse to recommend favorable action on this or any other measure."

Deputy Health Commissioner Thomas Jordan opposed the passage of the bill. He said that the present basement law was one of the best health measures that had ever been adopted with regard to Boston. The Health Department had accomplished much good in the enforcement of its provisions, and the officials of the department are anxious to continue this work. No rooms that cannot be supplied with fresh air and sunlight are fit to be occupied for living purposes, and the basement rooms which do not comply with the provisions of the present law cannot receive either. It is agreed by all sanitarians at the present time that the best disinfectants and preventives of disease are sunlight and fresh air. These basement rooms cannot be supplied with either, as they are below the level of the street, and the streets where such rooms exist are, as a rule, narrow, with high structures on both sides, so that the basement rooms receive no sunlight from the front, and, of course, receive the dirt and dust of the street traffic which is constantly being blown into the sleeping rooms on the street front. In cases

where they are in the rear of the house the same conditions prevail on account of the narrow yards in which ashes and rubbish are kept; and, with the sifting of ashes in these yards, the barrels being carried back and forth to the street, there is an almost constant current of dirt entering the windows when they are open.

Analyzing the bill, it was said that if these amendments were enacted into law, conditions would be worse than they have been for many years. It would make the law of 1907 retroactive; this requires all basement rooms to be 8 feet 6 inches stud. The amendment proposes to require in buildings built since that time up to the present day a 6-foot 6-inch stud. If extra floors were put in the existing rooms, which have 8 feet 6 inches stud and are unfit for use, the amendment would make it possible for these rooms to be used, but the conditions would be decidedly worse, because the rooms would be deprived of so much extra air space.

The amendment in regard to changing the yard space from 15 square feet to 10 square feet would, of course, make the conditions of these rooms more insanitary, because, as said before, these yards are small and all the ash, rubbish and garbage barrels are kept in them; ashes are sifted there, and of course with the smaller area, conditions would be infinitely worse than under the present law.

Another amendment is proposed to the clause requiring an abutment of 7 feet on an outside wall. This would be a serious setback if adopted. Unless the room above abuts 7 feet on an outside wall it would be impossible to cut a window of any size into the wall less than that width, so as to have proper support on the retaining wall.

Section B provides that: "Such window or windows shall have a total area of not less than one eighth of the floor area of said room, and both halves of the sash of each window shall be made to open to their full width and the top of each window shall be within 72 inches of the ceiling," and the present law stipulates that the tops of windows shall be within 6 inches of the ceiling. With a stud of 6 feet 6 inches, as called for in the amended bill, and with 72 inches from the window to the ceiling, only 6 inches of window space would be allowed. It is difficult to see how a double sash could be made to open top and bottom in a space of 6 inches.

The purpose of the entire bill is wrong, and it would be a serious backward step with regard to the housing conditions if its provisions were enacted into law.

Representatives of the Boston Chamber of Commerce, the Boston Real Estate Exchange, the Massachusetts Real Estate Exchange, the Women's Municipal League, the Massachusetts Civic Service Association and the Child Welfare League also appeared and recorded the opposition of their organizations to the passage of the proposed bill.

The committee has since given the petitioner leave to withdraw, the action being unanimous.

IMMUNIZING IN DIPHTHERIA.

The splendid response of the physicians of Boston to the request of the Health Department that all contacts receive immunizing doses of antitoxin is shown in the small number of secondary cases of diphtheria in a family. For this coöperation the department is very grateful but there are still a few sections of the city where the lesson of the absolute importance and necessity of immunization has not been learned.

We feel that as soon as a positive diagnosis of diphtheria has been established the family physician should immunize all contacts and in all cases where the family cannot afford to pay the fee the department will send a physician to immunize.

INFANT MORTALITY STATISTICS FOR 1916.

In response to letters sent to the Health Commissioners of the ten largest cities in the United States, information has been received concerning the infant mortality figures for 1916. Figures from four of the cities were based on the estimated number of births on account of delayed returns or inadequate method of reporting same.

A comparative schedule is given below, the fluctuations showing reduction in four cities and an increase in the remaining.

The death rate given is per thousand babies born.

CITIES.	1916.	1915.	CITIES.	1916.	1915.
St. Louis	89.4	82.07	Pittsburgh	111.8	110.0
New York	93.1	98.20	Chicago	111.9	114.0
Philadelphia	98.9	104.03	Detroit	112.8	104.6
Boston	104.1	104.00	Buffalo	113.9	108.2
Cleveland	107.0	110.70	Baltimore	118.9	141.1

DEATHS FROM RESPIRATORY DISEASES BY WEEKS
TO DATE.

WEEK ENDING:		CHIAL MONIA.		BAR MONIA.	Influ	JENZA.	Bronchitis.		
	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.	
Jan. 6	21	16	58	37	9		7	2	
13	31	11	38	38	21	5	4	3	
20	14	17	56	44	11	1	10	5	
27	22	11	43	33	10	4	4	4	
Feb. 3	24	18	30	51	3	4	. 8	3	
10	18	. 17	30	36	4	3	4	4	
17	. 17	28	28	20	2	2	3	1	
24	14	15	18	34	5	2.	4	6	
Mar. 3	11	28	33	36	11	2	3	5	
10	12	17	38	32	1	2	1	2	
17	15	15	25	34	2	1	2	3	
Totals	199	193	394	395	79	26	50	38	

By far the largest number of deaths from respiratory diseases occurred in persons under two and between the ages of forty-five and seventy, although it should be borne in mind that persons of all ages are susceptible. The winter has been a cold one, and the tendency has been all the greater to remain indoors in overheated and unventilated rooms where there has been much danger from contact. The organisms deposited upon the mucous membrane of the nose and throat find suitable place for growth and development. Often these organisms have no effect on persons but when the resistance of the individual is lowered they become active and disease results.

Proper clothing, sufficient amount of sleep, ventilation in living rooms, workrooms and sleeping rooms, fresh air, exercise and the avoidance of excesses all tend to strengthen the body to enable it to resist the germs of disease. Pneumonia weather is not yet over, neither is the season for severe "colds," and the practice of personal hygiene will save many from severe illnesses and maybe death.

Major Gorgas states: "I consider that prevention of tuberculosis remains the most important health problem in this country in spite of all the work that has been done along that line."

SHALL VACCINATION BE ABOLISHED?

At present we are brought face to face with determined attempts on the part of a class of faddists to abolish the most effective weapon the world has ever known against smallpox, namely, vaccination.

It seems difficult to believe that the Legislature should be asked to even give consideration to such a suggestion, but it is a fact that there are now pending before the House two bills (No. 710 and No. 1489) which, if enacted into law, would practically nullify existing vaccination legislation in this state.

The issue is placed squarely up to the medical fraternity and the strongest kind of measures must be taken promptly to combat the pernicious influence of the coterie of misguided laymen or self-seeking, anti-vaccinist doctors who are straining every effort to abolish vaccination. Let us hope that our legislators will not be influenced by the weird stories of death, suffering and disfigurement told by this band of anti-vaccinists.

At recent committee hearings there appeared physicians from the Boston Health Department, the Massachusetts State Department of Health, the Massachusetts Medical Society and the United States Government, all of whom were most emphatic in their statements in opposition to these bills. In favor of them there appeared some genteel old ladies who urged abolishing vaccination on the ground that they had heard that some one died from being vaccinated, vet they could not cite one single case where death had occurred from this cause. There appeared also a doctor who claimed that he had successfully treated many cases of smallpox by giving vaccine in an attenuated form through the mouth. Why any doctor can oppose vaccination in the form in which it has been successful for a century and vet resort to the use of the same virus in another form, is difficult to understand: particularly in view of the fact that the technique in general practice is known to be successful in the millions of cases administered, whereas, by the application of the virus through the mouth, the gastric juices of the stomach absolutely nullify its effect. (Another type of doctor present who strongly favored the passage of these bills is one whose medical advertisements are prohibited in this state.)

So there we find the situation. Eminent medical men from the city, state and government health departments inalterably opposed to the pernicious bills, while laymen lacking medical knowledge and a few doctors with axes to grind favor them. We hope that able men such as are found in the Legislature will be guided by the counsel of the men who know and who have the best interests of the state at heart and not be carried away by a lot of fairy tales.

It is quite a serious situation, for if these bills are passed it will expose the Commonwealth of Massachusetts to all the terrors of the most cruel and contagious of diseases. Against such a calamity it is necessary to fight tooth and nail.

Vaccination is no theory or experiment. Over one hundred years ago Doctor Jenner introduced vaccination against small-pox. The British Government voted him large grants of money. The most distinguished scientific bodies in the world conferred degrees on him. Since then untold millions of persons have been vaccinated. The vast armies fighting in Europe today have been vaccinated to the last man. Government commissions in the United States, England and Germany investigated vaccination and were unqualified in their approval of the practice as a positive safeguard against small-pox. Vaccination is compulsory in many large nations of the world. The United States Government compels immigrants arriving in this country to be vaccinated unless previously rendered immune.

Have all these people been wrong during the past century, or is the faddist who opposes vaccination because of some indefinite reason wrong?

The United States Government vaccinated two million people in the Philippines without the loss of a single life or limb and without any serious case of infection. In Boston where about twenty-five hundred children are vaccinated yearly by the Health Department not a single death or case of serious infection can be traced to this source.

We have, covering the past hundred years, tens of thousands of cases which prove beyond the shadow of a doubt that unvaccinated persons when exposed to smallpox nearly always take it, while even infants that have been vaccinated can sleep in the same bed with a smallpox case and never contract it. This is no guesswork. We know it.

If it were not for the persistent efforts being constantly made to abolish vaccination, it would seem unnecessary to enter into any defence of the practice, but these two bills now before the Legislature if enacted into law would announce to the world that Massachusetts renounced the teachings of a century and was prepared to expose her citizens to the worst scourge ever known.

Let us not take the matter lightly.

Proposed Legislation Affecting Vaccination.

[House Bill No. 1489.]

An Act to Permit Children and Other Persons to Attend Public Schools Without Being Vaccinated.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Any child or person who has reached the age at which attendance at school is permitted or required and who is otherwise eligible for enrollment, who presents a written statement, signed by either a parent or guardian if such child or person be a minor, or by himself if the person has reached the age of twenty-one, which declares that such parent or guardian or person is opposed to vaccination, shall not as a precedent to admission to the public schools, be required to submit to vaccination, and shall be allowed to attend the public schools, except at the time of a threatened or actual outbreak of smallpox, when the school board shall temporarily debar such child or person from the public schools.

SECT. 2. This act shall take effect upon its passage.

[House Bill No. 710.]

TO INSURE THE PURITY OF VACCINE VIRUS.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

SECTION 1. Any person who, within the limits of this commonwealth, inoculates any child attending the public schools with a virus or product that contains living germs of smallpox, or that is capable of causing smallpox, shall be required to pay a fine of one hundred dollars, or be imprisoned three months, or both, for each offense.

Sect. 2. Distributing, selling, or offering for sale, or having in possession with intent to distribute or sell or use, any preparation of what is supposed to be or is represented to be cowpox virus, or any product which is designed to be used as such, which contains bacilli of tuberculosis, bacilli (or spores) of tetanus, pus-producing microorganisms, or any living microorganisms except those of cowpox, is hereby forbidden.

Any person or persons, board, firm, corporation or agent violating any of the provisions of section two of this act shall be fined not less than one hundred dollars or be imprisoned not less than ninety days for each offense.

SECT. 3. This act shall take effect on its passage.

SECT. 4. Nothing in this act shall be so construed as to prevent the manufacture of vaccine virus in the laboratories of the Massachusetts state board of health, or in the laboratories of vaccine manufacturers licensed by this board.

PHYSICIANS REGISTRATION BILL.

The bill providing that the State Board of Registration on Medicine may, for cause, revoke the right of any physician to practice medicine if he is found guilty of a felony, or may suspend his registration if he is found guilty of confirmed habits of intoxication or using drugs, was signed March 10 by Governor McCall, having passed both branches of the Legislature.

SEIZURE OF SAUSAGE MEAT.

On February 24, 1917, inspectors of the Food Division seized at one of the large sausage houses in this city a container filled with celery tops, parts of frankfort sausages with casings on, chicken fat, pieces of hamburger, sticking pieces all bloody, bacon and ham rinds, sheep shins, bones, ground sausage meat all spiced, wooden skewers, sawdust, strings, paper, parts of bologna with casings, back sticks and chicken livers, the container evidently being used as a catch-all for wastes of all kinds.

The proprietor of the sausage place purchased this assortment at one of the retail stores in the market; paid $5\frac{1}{2}$ cents a pound for it, and he said at the office of the Health Department that he intended to pick it over and use selected pieces for the making of sausages.

The Health Department does not wish it to be understood that sausage places in this city are using this class of unwhole-some meats, but has given wide publicity to the seizure so as to break up the practice and to deter others who might be inclined to do this. The department would call attention to the fact that most of the sausage manufacturers in this city are reputable business men putting a good wholesome product on the market and who have sanitary up-to-date establishments, and it seems a pity that unscrupulous parties who have no regard for the public health should try to engage in this business.

The public can rest assured that no effort will be spared to see that the sausages manufactured and sold in this city shall be pure and wholesome. The license of the slaughter house where this unwholesome meat was seized has been revoked and will not be renewed.

CASES OF ALL COMMUNICABLE DISEASES RE-PORTED TO THE DEPARTMENT LAST YEAR.

Measles	5,324	Dysentery .			110
Diphtheria	2,409	Septic throat			83
Tuberculosis	2,256	Cerebro-spinal	men	in-	
Scarlet fever	1,766	gitis			64
Chicken pox	1,418	Malaria		٠	20
Whooping cough	1,393	Pellagra .			13
Ophthalmia neonato-		Tetanus .			10
rum	740	Anthrax .			5
Mumps	740	Leprosy .			2
Poliomyelitis	650	Variola			1
Typhoid fever	185				

AMOUNT OF FRESH AIR NECESSARY.

Parkes, in his "Text Book of Human Physiology," claims that the fresh air to be supplied in health during repose ought to be:

Adult males, 3,600 cubic feet per hour for each person.

Adult females, 3,000 cubic feet per hour for each person.

Children, 2,000 cubic feet per hour for each person.

Dr. J. S. Billings, an authority on the subject, in his work on "Ventilation and Heating," gives the following table:

				Cubic Feet of Air Per Hour.
Hospitals				3,600 per bed.
Assembly halls				3,600 per seat.
Barracks, bedrooms and w	orksl	ops		3,000 per person.
Schools and churches .				2,400 per person.
Theaters and audience hall	ls .			2,000 per seat.
Office rooms				1,800 per person.
Water-closets and bathroom	ms			2,400 each.
Dining rooms	٠.			1,800 per person.

DISPOSITION OF SOME BILLS BEFORE THE MASSACHUSETTS LEGISLATURE.

The following bills were given leave to withdraw:

House Bill 1035. On examination of dental hygienists.

House Bill 1195. On sale of meats, eggs, etc.

House Bill 1197. On making and sale of sausage meat.

House Bill 1356. To restrict further cold storage of food products.

House Bill 1491. On licensing dealers in food for public consumption.

House Bill 1191. On cleansing beverage receptacles.

House Bill 1493. On cleansing vessels used in dispensing ice cream.

House Bill 1031. On use of glasses for sale of soda.

House Bill 1497. On instruction in incorporated medical schools.

House Bill 496. On cold storage of eggs.

House Bill 1196. On sale of eggs unfit for food.

House Bill 1203. For state inspection of barber shops.

The spring is a good time to make a proper start to combat illness and insanitary conditions which, if we are not careful, are bound to make themselves felt later.

SUMMARY OF RATES.
Birth and Death Rates per 1,000 of Population, 1901–1916.

	1901–05.	1906-10.	1910-11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	26.0
Deaths (excluding stillborns)	18,75	17.88	17.08	16.17	16.10	15.76	16.06	16.8
Smallpox	.095	.0003	.001					
Measles	.124	.127	.107	.154	.105	.083	.053	.141
Scarlet fever	.153	.104	.107	.044	.105	.087	.106	.051
Diphtheria and croup	.387	.265	.180	.142	.212	.225	.291	.243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.091
Typhoid fever	.224	.160	.091	.079	.082	.088	.053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	.639	.605	.468
Diarrhea and enteritis (all ages)	1.112	1.033	1.139	.911	.837	.731	.711	.551
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.462
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.10

Births estimated by Registry Department.

SUMMARY OF VENEREAL DISEASES AS A PREVENTIVE MEDICINE PROBLEM.

To summarize the practical attack on venereal diseases. it may be said that the first line of attack, consisting of the discovery, treatment and control of infected individuals. should be led by the health departments cooperating with clinics, hospitals, and the private practitioners: the second, comprising the efforts to eliminate environmental conditions favorable to their dissemination by human carriers, must be led by the police departments cooperating with courts, law enforcement agencies, and the citizens; the third, directed toward protecting the uninfected, can best be led by the school departments cooperating with moral and social agencies and the parents. In all the diverse activities of these three major lines of conducting this health conservation battle, there stands out prominently the need for enlisting the forces of the dispensary and the hospital. This is so largely because the association between treatment and prevention is more intimate in this than in any other group of diseases. It is necessary that the members of the medical profession as well as other leaders of the community shall frequently review these facts in order that they may have the courage and the persistence to convert this problem from one of the conspicuous failures of public health to the conspicuous success which science has made possible.— Social Hygiene.

PROSECUTION FOR FAILURE TO REPORT CASE OF OPHTHALMIA NEONATORUM.

A Roxbury physician was summoned before Judge Hayden in the Roxbury District Court for failure to report a case of ophthalmia neonatorum to this department in compliance with the law.

A plea of *nolo* was entered by counsel for the physician who stated to the court that it was the first case of a birth that she had attended in eight years. She claimed ignorance of the law. A physician who was a witness for the defendant stated to the court that the eyes of the baby were now in an improved condition and coming along nicely.

Judge Hayden found the defendant guilty and placed the case on file.

CLIMATE IN CONSUMPTION.

"Climate in consumption is a will-o'-the-wisp. It is the end of the rainbow with its pot of gold. It is ever just a little beyond. It rests in Colorado, New Mexico, Arizona, California. Like children in their simple faith chasing the rainbow's vanishing end, delving for treasures where once it stood, our patient pursues his phantom, till worn and wasted, weary but hopeful still, he falls asleep, and awakes to learn that the magic end of the bow of promise rests upon the mystic shores of the spirit land."

There is nothing in all the world so important as little children; nothing so interesting. If ever you wish to go in for philanthropy, if ever you wish to be of any use in the world, do something for little children. If ever you yearn to be truly wise, study children. We can dress the sore, bandage the wound, imprison the criminal, heal the sick and bury the dead, but there is always a chance that we can save the child. If the great army of philanthropists ever exterminate sin and pestilence, ever work out the race's salvation, it will be because a little child has led them.

-David Starr Jordan.

During the past five weeks there has been an increase of 100 in deaths of persons over sixty years of age.

Every one should make an effort to render some aid in the coming baby campaign.

REPORT OF THE HEALTH UNIT FOR THE MONTH OF FEBRUARY, 1917.

Health Department.

Visits made by	medica	lins	pect	or:						
Contagious										47
Tuberculosis										10
Ophthalmia										8
Miscellaneou	ıs .									11
Total										76
Cases visited b	y nurse	S:								
Medical .										211
										601
Total								•		812
Defective sanit Calls by distric Instri Visits made by	et physicuctive I	cian Dist	fron	n Bo Nur	ston sing	Disp Ass	ensa socia	ry tion		18 149 607
	Baby	Hy	gien	e As	ssoci	atio	n.			
Total number	of babie	s ca:	red f	or						154
New babies ad	mitted		•							18
Babies readmit	tted]
Conferences he	eld .				•					
Total conferen										207
Home visits by	y nurses	•		•		•				465
Associa	ted and	1 He	ebre	w F	eder	ated	Cha	ariti	es.	
Cases investiga	ated and	ass:	isted		4	•		•		17
Con	sumpti	ives	Но	spit	al D	epai	tme	nt.		
Calls by nurses	s in dist	rict								882

The public health nurse is a great power in solving health problems. She can reach in an educational way people who could not be swayed for the better through any other means.

In the final analysis, public health problems must be solved by education. The public health nurse merits every aid and encouragement; opposition means a losing fight against public health.

Encourage her to spread the gospel of public health.

SUMMARY OF VITAL STATISTICS.

There were 1,478 deaths reported in the five weeks ending March 3, against 1,368 in the corresponding period last year, a death rate of 19.96 against 18.26.

Reported deaths of nonresidents numbered 195 against 166 last year.

Of deaths from reportable diseases the principal decreases were:

Whooping cough Cerebro-spinal meningitis Measles	<i>.</i>	•	 . •	 		. •	•	7 7 26
Accidental and violent							۰	25
Puerperal diseases .								14
Other causes								45
Pneumonia								60
Erysipelas								7

There were 60 more deaths under 1 year, 115 less under 5 years, and 100 more over 60 years.

MORTALITY FOR THE FIVE WEEKS AND SAME PERIOD IN 1916.

						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1917.	1916.
Total deaths									1,478	1,368
Nonresidents									195	166
Rate .									19.96	18.26
Corrected rat	e (n	onres	iden	ts de	duct	ed)			17.32	16.49
Deaths under	1 y	ear							217	211
Deaths under	2 y	ears							251	268
Deaths under	5 y	ears							291	306
Deaths over	30 y	ears							542	442

CAUSES OF DEATH.

1917.

1916.

Anterior poliomyelitis.				1.4		1	
Cerebro-spinal meningiti						2	7
Diphtheria			. ,		6	29	30
Measles						2	9
Scarlet fever						8	8
Influenza						13	12
Tuberculosis (pulmonary						111	131
Tuberculosis (other form	is)					8	22
Whooping cough						2	6
Influenza						13	12
Trichinosis				٠			1
Accidental and violent	٠.					97	72

											1917.	1916.
E	leart disease,	end	locar	ditis,	per:	icaro	litis :	and i	neph:	ritis	305	293
E	ronchitis										19	22
C	ancer .										74	76
Ι	iarrhea and	ente	ritis	(und	ler 2	year	rs)				15	19
I	iarrhea and	ente	ritis	(2 ye	ears	and	over)			6	3
E	rysipelas										16	9
N	Ieningitis an	d en	ceph	alitis							2	7
	ld age .										2	2
P	neumonia										 283	223
P	remature bir	th									48	44
P	uerperal dise	eases									24	10
	ther causes										403	359

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Five Weeks Ending March 3, 1917.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

	m	CASES.		DEATHS.		Nonre	SIDENTS	
	TOTAL	CASES.	TOTAL	DEATHS.		SES.	DEA	THS.
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.
Diphtheria	369	294	29	30	72	30	14	10
Scarlet fever	180	292	9	8	32	54	5	4
Measles	595	497	3	. 9	9	4		
Typhoid fever	11	16	3		3		2	
Whooping cough	16	202	3	6		3	2	
Tuberculosis (all forms)	236	296	127	153	29	24	27	18
Legal notices authorize				ISION.				464
Legal notices authorize								464
Prosecutions authorize					•			5
Hearing Premises ordered vacan					•	•		1 8
Miscellaneous orders					•			5
Applications Lying-in-								2
Forcible removals orde								4
Stable permit granted								1
Stable hearings								2
Undertaker appointed	•		•					1
Dump permit refused	•	* *	•			٠	•	1
	Lie	censes	— Peri	mits.				
Grease (licenses to rem								67
Vehicles inspected and	appro	ved .						327
Milk licenses	•				•			103
		(48)					

Licenses to peddle fruit and	vegeta	ables							113
Licenses to peddle fruit and Manicure — Massage .	,								19
									41
NO.									12
Numbers assigned									141
									2
Undertaker appointed .									1
Special drafts									1
Places assigned (revoked)									1
MEI	DICA	L DI	VISI	ON.					
Com	nuni	cable	Dise	ases.					
Number of visits by medical	inspe	ctors							1,891
Antitoxin given Deaths investigated									72
Deaths investigated									29
Cases brought to Boston for	treati	nent						٠	120
Vaccinations				٠					34
Vaccination certificates .									27
Antityphoid vaccine adminis	tered								1
Forcible removals recommend	ded								14
Public	· Ho	alth N	Viirci	no					
									0.100
Communicable disease visits									3,126
Number of revisits (infants)					٠	٠			1,074
									7,618
Number of new babies visited	A		•	•					
Total visits by nurses									11,818
Total visits by nurses									
Total visits by nurses BACTERIO Examinations	LOGI	 ICAL Diagr	LAB nosis	BORA	TOF	RY .			11,818
Total visits by nurses BACTERIO Examinations Diphtheria	LOGI	 ICAL Diagr	LAB nosis	BORA	TOF Rel	RY. ease			1,837
Total visits by nurses BACTERIO Examinations Diphtheria Tuberculosis	LOG! for	Diagr	LAB nosis	ORA and	TOF Rel	RY. ease	••		1,818 1,837 445
Total visits by nurses BACTERIO Examinations Diphtheria Tuberculosis Typhoid	LOG! for	Diagr	LAB nosis	ORA and	TOF Rel	ease	· ·		1,837 445 86
Total visits by nurses BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis	LOGi for	CAL Diagr	LAB nosis	ORA and	TOI Rel	ease	· ·		1,837 445 86 533
Total visits by nurses BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis	LOGI for	CAL Diagr	LAB nosis	GORA and	TOF	ease	· · · · · · · · · · · · · · · · · · ·		1,837 445 86 533 426
Total visits by nurses BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis	LOGI for	CAL Diagr	LAB nosis	GORA and	TOI Rel	ease			1,837 445 86 533
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina	for	CAL Diagr	LAB	SORA and	TOF	ease			1,837 445 86 533 426 177 746
Total visits by nurses BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis	for	CAL Diagr	LAB	SORA and	TOI Rel	ease			1,837 445 86 533 426 177
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream examina	for tions minat	CAL Diagr	LAB	BORA and	TOI Rel	ease			1,837 445 86 533 426 177 746
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa	for tions minat	CAL Diagr	LAB	SORA and	TOI Rel	RY.			1,837 445 86 533 426 177 746
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa	for tions minat	CAL Diagr	LAB nosis	SORA and	TOP Rel	RY.			1,837 445 86 533 426 177 746
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa	for tions minat	CAL Diagram of the control of the co	LAB nosis	SORA and	TOP Rel	RY.			1,837 445 86 533 426 177 746 1
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa	for tions minat	CAL Diagram of the control of the co	LAB nosis	GORA	TOP Rel	RY.			11,818 1,837 445 86 533 426 177 746 1 585 5,981
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa	for tions minat	CAL Diagram of the control of the co	LAB nosis	GORA	TOF Rel	ease			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa F Live Stock Ins Cattle inspected Cattle inspected Sheep inspected Swine inspected	for	ICAL Diagr	LAB nosis	GORA	TOF Rel	RY.			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62 6,729
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa F Live Stock Ins Cattle inspected Calves inspected Sheep inspected Swine inspected Animals condemned, whole	for	CAL Diagram of the control of the co	LAB nosis	GORA	TOF Rel	RY.			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62 6,729
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa F Live Stock Ins Cattle inspected Cattle inspected Sheep inspected Swine inspected Animals condemned , whole Parts condemned	for	ICAL Diagr	LAB	GORA	TOF Rel	RY.			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62 6,729 253 250
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa F Live Stock Ins Cattle inspected Cattle inspected Sheep inspected Swine inspected Animals condemned , whole Parts condemned Stores inspected	for	ICAL Diagr	LAB	GORA	Aba	atto			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62 6,729 253 250 2,038
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa F Live Stock Ins Cattle inspected Calves inspected Swine inspected Animals condemned , whole Parts condemned Stores inspected Fines	for	CAL Diagr	LAB	GORA	Aba	atto			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62 6,729 253 250 2,038 \$240
BACTERIO Examinations Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations* Bacteriological milk examina Bacteriological ice cream exa F Live Stock Ins Cattle inspected Cattle inspected Sheep inspected Swine inspected Animals condemned , whole Parts condemned Stores inspected	for	CAL Diagr	LAB	GORA	Aba	atto			11,818 1,837 445 86 533 426 177 746 1 585 5,981 62 6,729 253 250 2,038 \$240

^{*}Examination of rats, 103; Genito-Urinary Tuberculosis, 4; Ophthalmia, 57; Malaria, 7; Paratyphoid, 2; K. L. virulence, 3; Organisms, 1.

MILK INSPECTION

MILK IN	SPECTION.
(Examinations as to S	Statute Requirements.)
Samples examined:	
Chemical examinations of milk . Bacteriological examinations of mi	1,002
Bacteriological examinations of mi	lk
Chemical examinations of vinegar	
Chemical examinations of butter a	
Chemical examinations of ice crear	
Number of court cases	
Fines	
Inspection of Provisions	s — Articles Condemned.
Meat and Fish:	Meat and Fish:
Poultry 5 pounds	Calves' heads
Ham 25 pounds	Calves' heads 4 pounds
Beef : 30 pounds	Smelts $5\frac{1}{2}$ pounds
Corned beef 23 pounds	Haddock and cod . 500 pounds
Tarami 170 pounds	
Chicken $10\frac{1}{2}$ pounds	Eggs 33 pounds
Tile fish 3 pounds	Potatoes 16 pounds
Mullets 300 pounds	
Mackerel 230 pounds	
Miscellaneous meats, 254 pounds	
Veal 138 pounds	Dried peaches . 15 pounds
MORRIDITY AND MORTALI	TY FOR 9 WEEKS OF 1917.
MORDINI MORTAL	1917. 1916.
Total deaths	
Nonresident deaths	
Deaths under 1 year of age .	
Pneumonia	489 511
Cancer	
Heart disease	
Diarrhea and enteritis under 2 years	
DEATHS FROM COMMUNIC	ABLE DISEASES FOR SAME
PER	IOD. 1917.
	Non- 1917. 1916. residents.
Diphtheria	
Scarlet fever	
	0 44
Tuberculosis	195 218 20
CASES OF COMMUNICAB	LE DISEASES REPORTED.
(9 We	eeks.) 1917.
	Non- 1917. 1916. residents.
Diphtheria	627 523 129
Scarlet fever	313 575 65
Measles	887 736 1
Typhoid fever	
Whooping cough	
Tuberculosis	450 475 44
(5	0)

SANITARY INSPECTION.

		,					
New reports	4		٠				4,658
New tenement house reports							169
Legal notices recommended					٠		464
Reinspections							7,267
Nuisances reported							7,375
Complaints investigated .							1,375
Number of court cases .						۰	3
Fines							

MONTHLY METEOROLOGICAL SUMMARY, FEBRUARY.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 29.92; highest, 30.49; date, 25; lowest, 29.11; date, 9.

TEMPERATURE.

Highest, 53; date, 27; lowest, 3; date, 3; greatest daily range, 28; date, 26; least daily range, 7; date, 28; normal for month, 28.0.°

PRECIPITATION.

Total this month, 2.67; snowfall, 8.4; greatest precipitation in 24 hours, 0.72; date, January 31-February 1; snow on the ground at end of month, 0.0; normal for this month, 3.56.

WIND.

Prevailing direction, west; total movement, 8,045 miles; average hourly velocity, 12.0; maximum velocity (for five minutes), 39 miles per hour from west, on 3d.

WEATHER.

Number of days clear, 12; partly cloudy, 8; cloudy, 8; on which .01 inch or more of precipitation occurred, 11.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 8, 17, 25; lunar, 5, 8, 9, 27; hail, 0; sleet, 12; fog, 0; thunderstorms, 5; frost: light, 0; heavy, 0; killing, 0.

DO YOU KNOW THAT

Dirty refrigerators may make sickness?

The defective citizen of today is ofttimes the unhealthy child of yesterday?

Thus far this year communicable diseases have been kept at a low ebb, each disease showing a decrease over last year.

Deaths from pneumonia increase as the winter begins to wane.

Do not be too hasty in laying aside heavy clothing for that of lighter weight.

HEALTH DEPARTMENT MEDICAL DIVISION

FREE VACCINATION

The Health Department has established a Vaccination Station at 17 Blossom Street, near Cambridge Street, West End, where all persons residing in Boston may obtain vaccination free of charge every day between the hours of nine and twelve in the forenoon, and two to five in the afternoon, Sundays and Holidays excepted, and on Saturdays between nine and twelve in the forenoon.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				Pop	pulati	on	7	60,4	00				
Births				-	المدرر ره	* 19,750	Birth rate						26.0
Deaths						12,760	Death rat	е.					16.78
	Of	the	se	total	l deat	hs 14.1	per cent w	ere	non	resi	den	ts.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

^{*} Estimated by Registry Department.

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Commissioner of Health.

Publications and Licenses		1109 City Hall Annex.
Medical Division		1107 City Hall Annex.
Communicable Diseases		1107 City Hall Annex.
Child Hygiene		1108 City Hall Annex.
Health Unit		17 Blossom street.
Vaccination Station		17 Blossom street.
Detention Hospital		Southampton street.
Occupational Clinic		17 Blossom street.
Bacteriological Laboratory		1101 City Hall Annex.
Examination of Cultures	Ċ	1101 City Hall Annex.
Wassermann Tests		1101 City Hall Annex.
Food Inspection Division		1110 City Hall Annex.
•	٠	1110 City Hall Annex.
Inspection of Foodstuffs	٠	
Examination of Milk and Vinegar	٠	1104 City Hall Annex.
Inspection of Dairies	•	1102 City Hall Annex.
Brighton Abattoir	٠	Market street, Brighton.
Sanitary Inspection Division		1111 City Hall Annex.
Abatement of Nuisances		1111 City Hall Annex.
Examination of Gasfitters		1111 City Hall Annex.
Vital Statistics Records and Accounts		1112 City Hall Annex.
Permits for Burial		1112 City Hall Annex.
Superintendent of Peddlers		27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 11 p. m., inclusive, Sundays and holidays, for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

FRANCIS X. MAHONEY, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, BULLETIN OF THE HEALTH DEPARTMENT, BOSTON.

VOL. 6.

BOSTON, MARCH, 1917.

No. 3

"In a serious trust negligence is a crime."

THE DIAGNOSIS OF TUBERCULOSIS BY THE COMPLEMENT FIXATION TEST.

The diagnosis of pulmonary tuberculosis, tuberculosis of the kidneys and bladder as well as open tubercular lesions by the demonstration of the tubercle bacillus is very important and undoubtedly most accurate. The state and the federal governments recognize this test in all legal procedures where the question of tuberculosis arises.

The problem of an early diagnosis of tuberculosis in whatever organ of the body where the specific organism cannot be demonstrated, and where the clinical findings are not clear, even to the expert, has caused many clinicians and laboratory workers to search for other accurate methods of diagnosis.

The various tuberculin reactions, such as the Calmette eye test, Von Pirquet skin test, as well as the skin serum test suggested by Bronfenbrenner, have so far proved inadequate as they are too delicate and often give positive results in arrested and inactive cases.

The urochromogen test, albumen estimation in the sputum and Arnoth's leucocyte count have also proven inadequate and unreliable.

It is a well known fact that in most of the bacterial diseases the body reacts by the formation of antibodies and when this phenomenon does take place the presence of these antibodies can be detected in vitro by a number of different methods, depending on the reaction which occurs between the serum of the patient and the antigen prepared from the body constituents of the inciting micro-organism. On these reactions are based the agglutination tests, the precipitin tests and, perhaps the most important of all, the various methods of complement fixation.

Since the publication of Bordet in 1901 giving the results of the complement fixation tests in pest, typhoid and proteus vulgaris infections a new stimulus has been given to efforts for the diagnosis of tuberculosis by the above-named test, and many workers have proven the presence of antibodies in the blood of tuberculous patients by actual demonstration through means of the complement fixation test with various antigens.

It was while experimenting on this test that Wassermann and Bruck succeeded in establishing the all-important test for syphilis which bears Wassermann's name.

Ruppel and Richmann, Caulfield and Beaty, Calmette and Massel, Wassermann and Bruck and many others worked untiringly on this problem but none succeeded in producing a dependable active antigen, the chief difficulties being that these antigens were either anticomplementary in their action by themselves or with normal serums or they fixed with serums from patients suffering from diseases other than tuberculosis.

In 1914 Besredka and Bronfenbrenner succeeded in getting fairly good results with an antigen prepared by them and later Petroff introduced three antigens which gave fairly good results, but it was not until the introduction of the antigen prepared by Miller through the grinding of living tuberculosis germs with sodium chloride for about one hour and then adding enough sterile water to make an isotonic solution for which he made claims of accuracy equal to that of the Wassermann test that this laboratory felt that the test had been developed to a point where it was worthy of consideration as a routine examination.

The different antigens were prepared in this laboratory and it was proven to our satisfaction that the last-named antigen was far superior to all others with the exception, perhaps, of the antigen recently described by Craig which we have not as yet had the opportunity to test.

Many examinations have been made with bloods from known tubercular patients and it was found that the test was not only reliable but acts also as a guide to the progress of the disease.

In active cases where the patients were on the decline and the resistance to the disease was little, if any, the test was either a weak positive or negative, while in those cases that were improving, thus showing a good body resistance, the reaction was very strongly positive.

The laboratory has also examined over two thousand bloods

for tuberculosis which have been sent in for the Wassermann test, and with those that were positive for tuberculosis an attempt was made to learn the history of the case from the physician who sent in the blood. In the replies over 50 per cent of the positive findings were confirmed by positive clinical histories.

In a few cases the laboratory findings aided in the diagnosis of the disease.

A brief history of one case will not be out of place.

This patient was treated for a chronic laryngitis for some time without apparent improvement. He was referred to another physician who after some treatment suspected specific laryngitis and forwarded a blood to this laboratory for a Wassermann test. The Wassermann test proved negative but the complement fixation test for tuberculosis was positive. This information was imparted to the physician, who forwarded a second specimen of blood to the laboratory. The findings were the same as in the first specimen. The patient subsequently developed a cough and an examination of the sputum demonstrated the presence of the tubercle bacillus.

Up to the time of our finding the blood positive for tuberculosis there was no suspicion of this disease although the chronic laryngitis was undoubtedly tubercular.

Up to date the Bacteriological Laboratory of the Boston Health Department has examined over 3,000 specimens of blood for tuberculosis by means of the complement fixation test, using the antigen recommended by Miller, and the results obtained have proven so promising that as soon as the means are at hand it is the intention to recommend this test as an addition to the other routine examinations carried out for the physicians of the city.

TYPHOID IN THE LARGE CITIES OF THE UNITED STATES IN 1916.

The Journal of the American Medical Association in a recent issue presents its fifth annual survey of typhoid fever mortality in those cities of the United States having over 100,000 population.

Group 1, which contains the nine largest cities in the country, comprises a total population of 13,743,746, or about 14 per cent of the total population of the country.

The Journal states "that Boston achieves the best position and, indeed, reaches a remarkably good figure (3.5), the lowest

point yet touched by any member of Group 1. Boston, however, is closely pressed by New York for first place. The health officials in these two cities are to be congratulated on the success of the unremitting campaign they have waged in the past ten years against typhoid fever. The record deserves the widest publicity. Boston and New York have set a high standard for the rest of the country."

DEATH RATES FROM TYPHOID IN CITIES OF GROUP 1 (OVER 500,000 POPULATION).

Deaths from Typhoid per 100,000 Population.

	Average.							
	1916.	1915.	1911–1915.	1906-1910.				
Boston	3.5	5.5	8.0	16.0				
New York	3.8	6.0	8.0	13.5				
Chicago	5.2	5.4	8.2	15.8				
Cleveland	5.3	7.8	10.0	15.7				
Philadelphia	7.8	6.6	11.2	41.7				
Pittsburgh	8.6	10.3	15.9	65.0				
St. Louis	9.4	7.0	12.1	14.7				
Detroit	15.0	12.8	18.1	21.1				
Baltimore	18.0	21.9	23.7	35.1				

This low death rate is worthy of attention. Although this figure is the lowest ever attained by any large American city the rate would be appreciably lower were nonresident deaths excluded, and they constitute no small percentage in the total. Of the 26 deaths from typhoid fever in Boston last year nine were of people who came from outside cities and towns to Boston for treatment. This is probably a larger percentage than is found in any of the other cities mentioned in the table and excluding these nonresidents the Boston rate would be 2.5 per 100,000 population. It means that the rate has been reduced to a fifth of what it was during the period 1906–10 and that great progress has been made in the city in hygiene and sanitation and that hundreds of lives have been saved.

With a safe water supply, with probably the best milk supply of any city in the country, with the education of the public to antityphoid vaccination, with the enforcement of the laws relating to the production and handling of foodstuffs, and reducing flies and their breeding places to a minimum, it is hoped that the year 1917 will show even a lower rate than 3.5. This means much. It can be done but the public must coöperate.

METHODS IN SOLVING HEALTH PROBLEMS.

In different ways and from different angles, each city doing progressive health work has tried to find the ideal way to solve the health problem. Pioneers in the study of how best to reduce morbidity with its resultant mortality have all agreed that education of the community by constantly preaching the doctrine of preventive medicine, proper hygiene and sanitation is the formula which must result in a healthy community, city, state and nation. Originally tried as an experiment, it has been almost universally agreed that the health center is the ideal medium for the dissemination of the above-mentioned principles and a very important link in the chain of necessary divisions of a modern health department. New York has its health center in a congested cosmopolitan section of the city and is conducting an educational campaign. Philadelphia has made a house-to-house survey in a selected area trying to ascertain the amount of morbidity, and has invited those found to avail themselves of the health center. Buffalo has several health centers, each a miniature dispensary and hospital in itself. The energies and activities of these cities differ only in the selection of the best method to solve the problem of how to serve the community, but all are trying for an object in common — the preservation of the good health of the public by the accepted best method, a campaign of education.

In March, 1916, the West End of Boston was selected as an ideal location for such a health unit.

With its cosmopolitan population, the many foreign elements in the neighborhood, its crowded tenement houses, its residents speaking many tongues yet hungry for knowledge, and crying in many instances for help, it was indeed regarded as an ideal spot for the experiment.

The response of the people in the neighborhood was all that could be desired. The health talks, the baby shows, exhibitions, etc., in fact, all the public activities carried out at the center, are largely attended, and present an excellent opportunity to disseminate the modern health principles to the thousands who come to see and hear. In addition to a worker from each

branch of the Health Department representatives of the following agencies are housed and actively coöperate with the Health Unit:

Baby Hygiene Association, Boston Dispensary, Associated Charities, Hebrew Federated Charities, Women's Municipal League, Mothers' Clubs, School Center.

From a community point of view the Health Unit has become a center where one may come for advice, information, complaint, instruction, and, perhaps most important of all, for the dissipation of any unnecessary fear, as evidenced during our recent epidemics of infantile paralysis, when many people who came to the center in fear that their children were afflicted were placed at ease. The field workers who go out into the district every morning, representing the various agencies housed in the Unit, meet every week and discuss the cases visited and problems found, referring to other agencies' work foreign to their own department, and always aiming for one object, the improvement of conditions in the district.

SECOND BABY SHOW AND CONTEST.

The second baby show and contest conducted by this department was held at the Health Unit on Blossom street, April 17. All babies under five years of age living in the West End section of the city were eligible to enter. There were two classes, one being for babies under two years of age and the other class for babies between two years and under five.

The judging started at 1.30 p. m. and four prizes were awarded. Doctor Wilinsky, who is in charge of the Unit, had representatives of the many organizations that are coöperating at the Unit to assist in making the show a success. There were more than two hundred entries and much interest and enthusiasm was shown. It was evident that much of the advice recommended and suggestions offered the mothers at the last show were adopted, and with splendid results. The contest was very keen, as shown by the score cards at the end of the contest. These cards were prepared by the American Medical Association and it was the first time that this type of score card has been used at any show in this city.

Much credit is due the various agencies working in this section of the city as well as the physicians of the West End for making this show an even greater success than the last.

"Birth is not the commencement of life. Every baby born is alive for several months before birth, therefore it is necessary to consider the welfare of the mother and the unborn child."

GIVE YOUR PREMISES A THOROUGH CLEANING.

It is to be hoped that the results that will accrue this year from the efforts of a general "clean-up" on the parts of householders will be beneficial and lasting, and that the time will come when there will be no necessity for this annual cleaning process — that a clean home will be kept clean.

It is known that disease-producing germs survive longest in warmth, darkness and dampness, and it stands to reason that places and conditions where this combination exists should be removed, improved or destroyed.

Not only from the garret to the cellar should this cleaning process go on and rubbish be removed and old furniture broken up and burned, but conditions outside the house should have our attention. Yards, passageways and vacant areas should be cleaned and improved, stagnant pools filled in, drained or sprayed with oil; cans, pieces of crockery and other old and useless receptacles that have been discarded and are of no use except to hold stagnant water should be removed from the premises during the general cleaning. Rain conductors should be repaired; proper receptacles with covers provided for ashes, manure and garbage; rats' nests destroyed and their entrances and exits plugged up; old planking removed from the yard, and, where possible, fences removed.

Whitewash, paint, hot water and soap should be liberally applied within the house.

Cleaner homes mean better health and your good example will be emulated by your neighbor.

Prepare against outbreaks of disease this year by having a clean home and clean surroundings. It is far better to prevent disease than to try to cure it after it reaches a household.

Make every day clean-up day.

The Boston Dispensary has established a clinic for the treatment of diseases of the nose, throat, ear and eye for those who are at work during the day and are unable to afford the usual rates charged by the specialists for such services. Fees are charged covering the cost of the service.

THOMAS BERNARD SHEA, M. D.

Born April 9, 1861. Died March 25, 1917.

Dr. Thomas B. Shea was born in this city and educated in its public schools. After graduating from the Boston Latin School he entered Holy Cross College, from which institution he received his bachelor of arts degree in 1884 and master's degree in 1887. In the same year he graduated from the Harvard Medical School. He then became assistant resident physician of Long and Rainsford Islands, later becoming assistant port physician and medical inspector in the Health Department. In 1904 he was appointed Health Commissioner, but resigned two years later to become Chief Medical Inspector and later Deputy Health Commissioner in charge of the Medical Division.

He was a member of the National Association for the Relief and Control of Tuberculosis, American Public Health Association, Massachusetts Association of Boards of Health, Massachusetts Medical Society and Boston Medical Library Association.

For almost thirty years he worked faithfully and zealously in guarding the health of the citizens of Boston and was on call at any hour of the day or night. Modest, unassuming and retiring, he battled indefatigably to produce results that have been remarkable and a credit to him and his city. While the Medical Inspection Division was under his supervision death rates from communicable diseases were reduced

to the lowest figure in the history of the city. Vaccination, the use of antityphoid serum and antitoxin as preventives against disease he always believed to be the best weapons to fight smallpox, typhoid fever and diphtheria, and results have supported his belief.

He was widely known on account of his achievements in smallpox control, especially during the epidemic of 1901–02, when he personally saw and diagnosed more than 1,600 cases of this disease. He was famous for his ability to quickly detect and diagnose smallpox and leprosy besides the other communicable diseases.

His work last year in connection with the outbreak of anterior poliomyelitis (infantile paralysis) kept him busy day and night, and his efforts were not in vain, inasmuch as when the outbreaks in the many cities were over, Boston compared more than favorably with the other cities afflicted.

The efforts of Doctor Shea during the Spanish-American War won him great praise. At the outbreak of hostilities he, with the late Doctor McCollom, was appointed a special committee on smallpox, and his active coöperation was sought in fitting out the then proposed hospital ship "Marmion."

The Massachusetts Volunteer Aid Association at that time passed a unanimous vote of thanks to Doctor Shea for the masterly manner in which he met the unfortunate emergency caused by the accident to the steamship "Lewiston," near Point Judith, "that by his prompt, effective and fearless action he saved the lives of many men and prevented a great calamity."



BLACK SPOTS show the location of dairies which send Boston its daily supply of 370,000 quarts of milk, nearly ninety per cent of which comes from out of the state. Note the distances of most of these black spots from Boston, showing clearly how such milk must necessarily be several days old before it even gets to Boston, after which mixing, grading, pasteurizing and delivery takes still more time.

THE SANITARY CONTROL OF THE MILK SUPPLY OF BOSTON.

The average citizen, when the city's milk map is called to his attention, seldom realizes that the proper supervision of milk is one of the most vexatious problems confronting sanitarians at the present time. Referring to the map it will be seen that Boston obtains its milk supply from six different states, namely, Maine, New Hampshire, Vermont, Massachusetts, Connecticut and Eastern New York,* and to efficiently safeguard the production, handling and transportation of this important food product from the dairy barn to the table of the consumer is no small task.

The Boston Health Department for many years maintained a system of milk inspection which dealt mainly with elementary forms of adulteration, such as the removal of cream and the addition of water or of preservatives. The detection and prevention of these fraudulent practices was its principal function. In recent years, however, with the development of bacteriological science, it was realized that a knowledge of the bacteriological content of milk was of far greater importance from a public health standpoint than was its chemical composition, and as it became known that the bacterial content of milk usually typified the cleanliness of the methods used in its production, attention was directed to farm supervision. loading stations, country creameries and railroads. The necessity for such supervision resulted in the establishment of the Dairy Inspection Division, as it was obvious that the successful control of the milk supply could not be maintained unless supervision was extended to its very source.

Having in mind that milk is the most difficult of all foods to produce, transport and deliver in a fresh, clean and satisfactory condition, that it readily absorbs odors and flavors, that it decomposes more rapidly than any other food product, that in it germs, both pathogenic and benign, thrive and multiply, it is apparent that to furnish the consumer with a clean milk of low bacterial content necessitates great care from milking time to actual consumption. It requires cleanliness of the cows and the milkers, properly constructed and clean barns, thoroughly cleansed utensils, exclusion of dust at every stage, immediate cooling after milking and efficient icing during transportation.

The work of the dairy inspector commences at the country

^{*}At the present time milk and cream are also being received from the Province of Quebec.

creamery or receiving station where the milk is brought in by the producers or collectors. The appearance, cleanliness and temperature of the milk are observed and if any of the product arrives in an unsatisfactory condition this fact is immediately called to the attention of the producer. If he is not present, the name is noted and the matter is taken up later when the farm is visited. A thorough inspection of the creamery follows, and the methods of handling the milk, the cleanliness of apparatus, the construction of the creamery, the health of the employees and the water supply are investigated. The result of the inspection is entered on a score card, adopted for this purpose by the United States Department of Agriculture, which gives a definite numerical value to each creamery inspected.

This year, in addition to this sanitary inspection, a bacteriological examination will be made by the dairy inspector of the product of each producer as it arrives at the creamery. While at the creamery the inspector notes the condition of the cars and the methods of refrigeration.

Each dairy supplying the creamery is then visited and the resulting inspection is scored on a dairy score card which, as in the case of the creamery score card, places a definite value on each condition and from the total a relative value is accorded each dairy. During the inspection all insanitary conditions are called to the attention of the producer, and directions for the remedying of these conditions are plainly indicated on the score card.

The scores are made in triplicate; one copy is left with the farmer and the other two copies are mailed to the main office, where one is placed on file and the other is sent to the contractor receiving the product of the dairy inspected.

Upon arrival in the city the same rigid supervision of the milk is maintained. All large city milk plants are inspected daily and are scored in a similar manner to the country creamery. The premises of the smaller dealers are frequently inspected and scored.

CLEAN HANDS.

Disease germs lead a hand-to-mouth existence. If the human race would learn to keep the unwashed hand away from the mouth many human diseases would be greatly diminished. We handle infectious matter more or less constantly and we continually carry the hands to the mouth. If the

hand has recently been in contact with infectious matter the germs of disease may in this way be introduced into the body. Many persons wet their fingers with saliva before counting money, turning the pages of a book, or performing similar acts. In this case the process is reversed, the infection being carried to the object handled, there to await carriage to the mouth of some other careless person.

Wash the hands immediately:

Before eating.

Before handling, preparing or serving food.

After attending the sick.

After handling anything dirty.

BOSTON COMMITTEE ON PUBLIC SAFETY.

Subcommittee on Medicine, Hygiene and Sanitation.

Dr. Edward H. Bradford, Dean, Harvard Medical School.

Dr. Allen J. McLaughlin, Massachusetts State Commissioner of Health.

Dr. Francis X. Mahoney, Boston City Health Commissioner.

Dr. John J. Dowling, Superintendent and Medical Director, Boston City Hospital.

Dr. Frank P. Williams, Surgeon-General, Massachusetts Volunteer Militia.

Dr. David L. Edsall, Public Health Council, State Department of Health.

Prof. George C. Whipple, Public Health Council, State Department of Health.

Dr. Harvey Cushing, Surgeon-in-Chief, Peter Bent Brigham Hospital.

Dr. Frederic A. Washburn, Administrator and Resident Physician, Massachusetts General Hospital.

Dr. J. Emmons Briggs, Professor of Surgery, Boston University Medical School.

The Thirteenth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis will be held at Cincinnati, Ohio, May 9–11. The complete program of the meeting will be mailed on request by Mr. Courtenay Dinwiddie, Secretary of the Association, 209 West Twelfth street, Cincinnati, Ohio. The program as mapped out is full and complete and should be interesting to all those engaged in the study and prevention of this disease.

PHYSICIANS' REGISTRATION LAW.

The attention of physicians in this city is called to the following section of a law that was enacted by the Legislature and approved March 10, 1917.

Section 3. Chapter seventy-six of the Revised Laws is hereby amended by inserting after section 9 the following new section, to be numbered 9A:

9A. No person shall enter upon, or continue in the practice of medicine within this Commonwealth until he shall have presented his certificate of registration as a physician in this Commonwealth to the city or town clerk of the city or town where he has, or intends to have, an office or his usual place of business and shall at the time of such presentation of said certificate pay to the said city or town clerk a fee of twenty-five cents.

ACTION OF THE BOSTON HEALTH DEPARTMENT UPHELD BY THE STATE DEPARTMENT OF HEALTH.

At a meeting of the Public Health Council on March 13, 1917, the following vote was taken:

Whereas, a hearing was held on the appeal of the Brandon Farms Milk Company from the action of the Boston Health Department in refusing to receive from said company an application for a license to sell and deliver milk in the City of Boston, said action by the Boston Health Department being construed by the Attorney-General as a refusal to grant such a license, thus giving the Brandon Farms Milk Company grounds for action under section 4, chapter 443, of the Acts of 1909; and whereas, at the hearing it was shown that the applicant has failed to comply with the regulations established by the Health Department in the City of Boston, it was voted that the said constructive refusal of the Boston Health Department to issue a license to the said Brandon Farms Milk Company be sustained.

A. J. McLaughlin, Commissioner of Health.

HEALTHGRAMS - 1916 and 1917.

1. .

The cough and sneeze Both spread disease,

And so does spit,

Take care of it.

2.

The fly is crafty
And alert,
He carries germs,
And also dirt —
KILL HIM!

3.

From summer heat
Our babies languish,
Let's keep them cool,
And save them anguish.

4.

Breathe all the fresh air That you can; Stale air is Enemy to man. 5.

Foods should be fresh And pure and clean, Be on your guard For dirt unseen.

6.

In reading and working
You must have good light
If you want to preserve
Your invaluable sight.

7.

To wash your hands
Before you eat
Will keep you well
And keep you neat.

8.

Care for your baby,
Whatever you do;
In old age you'll want him
To care for you.

SUMMARY OF RATES.
Birth and Death Rates per 1,000 of Population, 1901-1916.

	1901-05.	1906-10.	1910–11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	26.0
Deaths (excluding stillborns)	18.75	17.88	17.08	16.17	16.10	15.76	16.06	16.8
Smallpox	.095	.0003	.001					
Measles	.124	.127	.107	.154	.105	.083	. 053	.141
Scarlet fever	.153	.104	.107	.044	.105	.087	.106	.051
Diphtheria and croup	.387	.265	.180	.142	.212	.225	.291	.243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.091
Typhoid fever	.224	.160	.091	.079	.082	.088	.053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	.639	.605	.468
Diarrhea and enteritis (all ages)	1.112	1.033	1.139	.911	.837	.731	.711	.551
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.462
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.10

Births estimated by Registry Department.

PULMONARY TUBERCULOSIS BY AGE PERIODS, JANUARY, FEBRUARY AND MARCH, 1917.

AGE PERIODS.	Under 5 Years.	5 to 10 Years.	10 to 15 Years.	15 to 20 Years.	20 to 25 Years.	25 to 30 Years.	30 to 35 Years.	35 to 40 Years.	40 to 45 Years.	45 to 50 Years.	50 to 55 Years.	55 to 60 Years.	60 to 65 Years.	65 to 70 Years.	70 to 75 Years.	75 to 80 Years.	80 to 85 Years.	85 to 90 Years.	90 to 95 Years.	Totals.	Grand Total.
Male	6	8	14	24	50	60	44	40	36	44	23	19	13	1	1	2				385	
Female	5	4	15	20	48	43	30	20	18	13	9	7		1	4	2		1	1	241	626

HYGIENE v. DRUGS.

Just as the patent medicine signs on the fences of a rural community gauge the standard of intellectual enlightenment of that community, so does the welfare of the city's children determine the moral and mental advancement of the municipality. The people of wide country spaces, who still resort to liniment for bruises and sprains, are but one removed from the man who takes kidney pills or the woman who takes headache powders. Real medicine is advancing, so that we have almost arrived at that stage where our patients do not pay us for medicine but for advice, and we — some of us at any rate — have almost come to the point where we are willing to neglect the medicine altogether, and our patients have learned that we are able to do them more good without medicine than with it.— Dr. George Goler.

PULMONARY TUBERCULOSIS CASES REPORTED BY WARDS, JANUARY, FEBRUARY AND MARCH, 1917.

WARDS.	January.	February.	March.
1	6	6	4
2	9	6	3
3	' 4	2	6
4	8	4	4
5	30	32	42
6	29	7	23
7	3	14	7
8	11	4	9
9	15	8	10
.0	5	8	7
1	6	4	6
2	9	10	10
	20	12	17
4	. 8	6	6
15	8	4	8
6	4	3	2
17	7	10	11
8	6	6	5
19	2	5	6
20	5	. 6	5
21	. 4	4	6
22	9	3	7
23	5	3	5
24	7	4	7
25	2	3	7
26	2	3	2
Unknown			
Totals	224	177	225

PULMONARY TUBERCULOSIS, JANUARY, FEBRUARY AND MARCH, 1917.

Cases by Sex, Condition, Color and Mother Nativity.

	January.	February.	March.
Sex:			
Male	132	109	144
Female	92	68	81
Unknown			
Totals	224	177	225
Conjugal Condition:			
Single	104	82	97
Married	82	72	80
Widowed	12	4	8
Divorced	5	1	4
Unknown	21	18	36
Totals	224	177	225
Color:			
White	212	163	209
Chinese and black	12	14	16
Unknown			
Totals	224	177	225
Mother Nativity:			
Boston	16	14	10
United States	30	16	37
Ireland	61	53	50
England, Scotland and Wales	12	5	10
Germany	2	4	9
Canada	25	23	26
Sweden	3	5	4
Italy	-14	13	11
France			
Russia	17	12	21
Other countries	40	31	41
Unknown	4	1	ϵ
Totals	224	177	225

PULMONARY TUBERCULOSIS, JANUARY, FEBRUARY AND MARCH, 1917.

Cases by Kind of House, Sanitation, Sleeping Arrangements, Sputum Reports and Hospital.

	January.	February.	March.
Kind of House:	,		
Single	23	21	22
Two apartment	29	28	28
Three apartment	68	52	55
Four apartment	13	7	6
Hotel		2	
Lodging house.	35	23	30
Institution	. 5	2	7
Basement	1		
Not given	50	42	77
Totals	224	177	225
Sanitation:			
Excellent	35	19	30
Good	79	64	79
Fair	58	52	59
Poor	23	15	10
	1	15	10
Very poor	28	07	A P7
Not given		27	47
Totals	224	177	225
Separate Room:			
Yes	140	108	126
No	45	36	40
Not given	39	33	59
Totals	224	177	225
Separate Bed:			
Yes	153	111	136
No	36	33	36
Not given	35	33	53
Totals	224	177	225
putum:			
Positive	58	45	61
Negative	24	19	13
Not given	142	113	151
Totals	224	177	225
Iospital:			
Yes	64	50	53
No	160	127	172

REPORT OF THE HEALTH UNIT FOR THE MONTH OF MARCH, 1917.

Health Department.

nealth Department.										
Visits made by	medica	al ins	spect	or:						
Contagious.										90
Tuberculosis										10
Ophthalmia										12
Miscellaneous	S.									14
Total .										126
Cases visited by	y nurse	s:								
Medical .										295
70 7 1										385
/D. / . 1										
Total .	•				٠				•	608
Defective sanita	arv cor	ditio	ons fo	nınd	in 1	enen	nent	hous	es	36
Calls by district	-								,00,	192
	0 1213 81		22 0 22	200	00011	101	,011,00	<i>J</i>	•	102
Instru	ctive	Dist	rict	Nur	sing	Ass	ocia	tion	١.	
Visits made by					_					680
,										
	Baby	Hy	gien	e As	soci	atio	n.			
Total number o	f babie	es ca	red f	or						164
New babies adr	nitted									26
Babies readmitt										2
Conferences hel										5
Total conference	0 0 1 + 0 =	.1								
menor 0 0 0 0	e atter	idan	ce							290
Home visits by										290 545
Home visits by										
Home visits by Associat	nurses	,					٠			
Associat	nurses	: -: d H (ebrev	w Fe	eder	ated	Cha	ariti	es.	
Associat Cases investigat	nurses ed and ted and	d Ho	e bre visted	w Fe	eder	ated	Cha	ariti	es.	545
Associat Cases investigat	nurses ed and ted and sumpt	d Hod ass	ebrevisted ' Ho	· · · spit	eder al D	ated Depai	Cha	ariti · ent.	es.	545

SUMMARY OF VITAL STATISTICS.

There were 1,093 deaths reported in the four weeks ending March 31 against 1,038 in the corresponding period last year, a death rate of 18.45 against 17.80.

Reported deaths of nonresidents numbered 151 against 153 last year.

Were: 6 Whooping cough 6 Diphtheria 5 Heart disease and nephritis 21 Measles 8 Tuberculosis (all forms) 10 Erysipelas 7 and the principal increases were: -7 Accidental and violent 22 Tuberculosis (pulmonary) 25 Scarlet fever 3 Other causes 29 Pneumonia 13 Puerperal diseases 10 Prematurity 5 There were 11 less deaths under 1 year, 17 less under 5 years, and 47 more over 60 years. MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916. 1917. 1916. Total deaths 1,093 1,038 Nonresidents 151 15 Rate 18.45 17.80 Corrected rate (nonresidents deducted) 15.90 15.18 Deaths under 1 year 151 162 Deaths under 2 years 182 189 Deaths under 5 years 216 233 Deaths under 5 years 216 233 <th>Of deaths from reportable</th> <th>diseases</th> <th>s the pr</th> <th>incipal d</th> <th>ecreases</th>	Of deaths from reportable	diseases	s the pr	incipal d	ecreases
Diphtheria			•	•	
Diphtheria	1111				0
Erysipelas 7 and the principal increases were: Accidental and violent 22 Tuberculosis (pulmonary) 25 Scarlet fever 3 Other causes 29 Pneumonia 13 Puerperal diseases 10 Prematurity 5 There were 11 less deaths under 1 year, 17 less under 5 years, and 47 more over 60 years. MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916. Total deaths 1,093 1,038 Nonresidents 1,151 153 Rate 1,164 155 Rate 1,164 1590 15.18 Deaths under 1 year 151 162 Deaths under 1 year 151 162 Deaths under 2 years 182 189 Deaths under 5 years 216 233 Deaths over 60 years 361 814 CAUSES OF DEATH. Cerebro-spinal meningitis 6 4 Diphtheria 14 19 Measles 2 10 Scarlet fever 8 5 Influenza 7 4 Tuberculosis (pulmonary) 109 84 Tuberculosis (pulmonary) 109 84 Tuberculosis (other forms) 14 24 Whooping cough 1 7 Influenza 7 4 Accidental and violent 65 43 Heart disease, endocarditis, pericarditis and nephritis 208 229 Bronchitis 7 6 Cancer 72 71 Diarrhea and enteritis (under 2 years) 12 13	Whooping cough				par
Erysipelas 7 and the principal increases were: Accidental and violent 22 Tuberculosis (pulmonary) 25 Scarlet fever 3 Other causes 29 Pneumonia 13 Puerperal diseases 10 Prematurity 5 There were 11 less deaths under 1 year, 17 less under 5 years, and 47 more over 60 years. MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916. Total deaths 1,093 1,038 Nonresidents 1,151 153 Rate 1,164 155 Rate 1,164 1590 15.18 Deaths under 1 year 151 162 Deaths under 1 year 151 162 Deaths under 2 years 182 189 Deaths under 5 years 216 233 Deaths over 60 years 361 814 CAUSES OF DEATH. Cerebro-spinal meningitis 6 4 Diphtheria 14 19 Measles 2 10 Scarlet fever 8 5 Influenza 7 4 Tuberculosis (pulmonary) 109 84 Tuberculosis (pulmonary) 109 84 Tuberculosis (other forms) 14 24 Whooping cough 1 7 Influenza 7 4 Accidental and violent 65 43 Heart disease, endocarditis, pericarditis and nephritis 208 229 Bronchitis 7 6 Cancer 72 71 Diarrhea and enteritis (under 2 years) 12 13	Heart disease and perhaitis				0.4
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Accidental and violent	Tuberculeria (ell forms)				10
Accidental and violent	Erusinolas				
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Tuberculosis (pulmonary) 25 Scarlet fever 3 3 6 6 6 4 6 6 4 6 6 6	and the principal increases we	ere:			
Scarlet fever	Accidental and violent				. 22
Scarlet fever	Tuberculosis (pulmonary)				
Pneumonia 13 Puerperal diseases 10 Prematurity	Scarlet fever				. 3
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MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916. 1917. 1916. 1917. 1916. 150	Prematurity				. 5
MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916. 1917. 1916. 1917. 1916. 150					
MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916. 1917. 1916. Total deaths 1,093 1,038 Nonresidents 151 153 Rate 18.45 17.80 Corrected rate (nonresidents deducted) 15.90 15.18 Deaths under 1 year 151 162 Deaths under 2 years 182 189 Deaths under 5 years 216 233 Deaths over 60 years 361 814 CAUSES OF DEATH. 1917. 1928. 1937. 1938. 1938. 1938. 1937.					

							1917.	1916.
Erysipelas .						. `	5	12
Meningitis and	encer	halit	is				4	7
Old age							2	
Pneumonia .							177	164
Premature birtl	h.						33	28
Puerperal disea	ses						21	- 11
Other causes .							312	283
Old age Pneumonia . Premature birtl Puerperal disea	h ses			 	 	 · ·	177 33 21	16 ⁴ 28

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending March 31, 1917.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

	Tomer	Cases.	Tomas	DEATHS.	Nonresidents.						
	TOTAL	CASES.	TOTAL .	DEATHS.	CAS	SES.	DEATHS.				
	1917. 1916.		1917.	1916.	1917.	1916.	1917.	1916.			
Diphtheria	320	209	14	19	48	31	2	4			
Scarlet fever	183	264	8	5	40	65	2	3			
Measles	659	568	2	10	15	4					
Typhoid fever	10	10	. 4	3	3	1	2	1			
Whooping cough	22	170	. 1	7		5					
Tuberculosis (all forms)	273	203	123	108	29	24	17	6			

CENTRAL DIVISION.

Legal notices authorized						ζ.			464
Prosecutions authorized	74								8
Stable hearings									6
Premises ordered vacated	ł								18
Miscellaneous orders									7
Applications Lying-in-Ho	ospit	al a	ppro	ved					4
Forcible removals ordere									2
Stable permit granted									1
Undertakers appointed									2
Dump permit revoked									1
	Lie	cen	ses –	- Per	mit	S.			
Grease (licenses to remov	re)								69

Vehicles inspected and approved			576
Milk and oleomargarine licenses			183
Permits to conduct offensive business			2
Permit to conduct offensive business revoked			1
To occupy rooms in stable			7
Licenses to peddle fruit and vegetables .			106

Manicure — Massage									15			
Hen permits									5			
Dump permits									4			
Numbers assigned									116			
Stable licenses granted (provisiona									2			
Undertakers appointed									2			
Dump permit revoked									1			
Places assigned									2			
Stable license (final)									1			
MEDICAL DIVISION.												
Communicable Diseases.												
Number of visits by medical inspe	ctors								1,264			
Antitoxin given									3,304			
Deaths investigated									15			
Cases brought to Boston for treatr	nent								103			
Vaccinations									22			
Vaccination certificates									14			
Antityphoid vaccine administered Forcible removals recommended									5			
Forcible removals recommended									2			
··												
Public He	ealth	1 Ni	ırsin	g.								
									3,304			
Number of revisits (infants) .									609			
Number of new babies visited									5,386			
Total visits by nurses .									9,299			
a decar vacated by and about							·	•	0,200			
BACTERIOLOGI	CAI	L LA	BOI	RAT	ORY	7.						
Examinations for	Diag	gnos	is a	nd F	Relea	ise.						
Diphtheria									1,804			
Tuberculosis									361			
Typhoid									64			
Syphilis									425			
Gonorrhea									359			
Other examinations *									135			
${\bf Bacteriological\ milk\ examinations}$	•								626			
Bacteriological ice cream examinat	tions								17			
FOOD I	NSD	ECT	TON	ī								
Live Stock Inspects			_									
Cattle inspected												
0.0									7,956			
Sheep inspected						•	•	•	11			
Swine inspected		•		•		•		•	4,679			
Animals condemned, whole . Parts condemned					•	•			59			
Stores inspected									287			
~			•				•	•	1,820			
Fines	•		•			•		•	\$350			
*Evenination of rate 70: Capito-Uring		. l	-1	0.0	7. (7	1 .						

^{*} Examination of rats, 70; Genito-Urinary Tuberculosis, 9; Ophthalmia, 50; Malaria, 3; Prostatic fluid for T. B., 1; K. L. virulence, 1; Organisms, 1.

MILK INSPECTION.

(Examinations as to Statute Requirements.)

(Examinations as to Statute Requirements.)	
Samples examined:	
Chemical examinations of milk	. 1,299
	. 626
Chemical examinations of vinegar	. 8
	. 78
75	. 17
Number of court cases	. 47
	. \$1,105
	. \$2,200
Inspection of Provisions — Articles Condemned.	
Meat and Fish: Miscellaneous:	
Poultry 51 pounds Spanish peppers . 11	cans
Liver $3\frac{1}{2}$ pounds Eggs 720	dozen
	pounds
Fish 2,800 pounds Potatoes 3,160	pounds
Udders 30 pounds Olives 125	pounds
Veal 8 pounds	
MORBIDITY AND MORTALITY FOR 13 WEEKS OF	1917.
1917.	1916.
Total deaths	3,700
Nonresident deaths	486
Deaths under 1 year of age	532
Pneumonia	675
Cancer	224
Heart disease	520
Diarrhea and enteritis under 2 years	41
DEATHS FROM COMMUNICABLE DISEASES FOR SA	ME
PERIOD.	
PERIOD.	1917. Non-
	esidents.
Diphtheria 61 73	16
Scarlet fever	7
Measles	ninem.
Typhoid fever	4
Whooping cough 4 26	2
Tuberculosis	31
CASES OF COMMUNICABLE DISEASES REPORTED	
(13 Weeks.)	1917.
· · · · · · · · · · · · · · · · · · ·	Non-
	esidents.
Diphtheria	177
Scarlet fever	105
Measles	16
Typhoid fever	7

Detroit, with a birth rate of 42.34 and a death rate of 19.24, had the highest birth and death rates of any of the twenty-four large cities.

49

687

600

660

66

Whooping cough .

Tuberculosis . .

SANITARY INSPECTION.

New reports						4,968
New tenement house report	s.					140
Legal notices recommended						611
Reinspections			٠.			6,669
Nuisances reported						7,584
Complaints investigated .						1,319
Number of court cases .						1
Fines						\$10

MONTHLY METEOROLOGICAL SUMMARY, FEBRUARY.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 30.04; highest, 30.57; date, 7; lowest, 29.41; date, 5.

TEMPERATURE.

Highest, 61; date, 26; lowest, 17; date, 5; greatest daily range, 25; date, 26; least daily range, 6; date, 4; normal for month, 35.0.°

PRECIPITATION.

Total this month, 3.73; snowfall, 12.9; greatest precipitation in 24 hours, 1.45; date, 4-5; snow on the ground at end of month, 0.0; normal for this month, 4.08.

WIND.

Prevailing direction, west; total movement, 9,265 miles; average hourly velocity, 12.5; maximum velocity (for five minutes), 45 miles per hour from northeast, on 5th.

WEATHER.

Number of days clear, 12; partly cloudy, 10; cloudy, 9; on which .01 inch or more of precipitation occurred, 13.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 2, 7, 14, 20, 23, 27; lunar, 1, 7, 10; hail, 0; sleet, 2; fog, 0; thunderstorms, 0; frost: light, 0; heavy, 0; killing, 0.

The nine largest cities in the country had over 25,000 deaths from pneumonia during 1916. Of this large total St. Louis recorded only 111.

Of the twenty-four largest cities in this country Seattle, in 1916, showed the lowest birth rate and the lowest death rate.

In the above-mentioned cities there have been almost 32,000 deaths from tuberculosis in the same period.

HEALTH DEPARTMENT MEDICAL DIVISION

FREE VACCINATION

The Health Department has established a Vaccination Station at 17 Blossom Street, near Cambridge Street, West End, where all persons residing in Boston may obtain vaccination free of charge every day between the hours of nine and twelve in the forenoon, and two to five in the afternoon, Sundays and Holidays excepted, and on Saturdays between nine and twelve in the forenoon.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				F	op	ulat	ion				. 76	0,4	00				
Births		٠		,			* 19	,750	Bi	rth:	rate		٠				26.0
Deaths							I	2,760	D	eath	rate						16.78
	Of	the	ese	tot	tal	dea	ths	14.1	per	cen	t wer	e i	non	resi	den	ts.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

^{*} Estimated by Registry Department.

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Commissioner of Health.

Publications and Licenses		٠	٠	1109 City Hall Annex.
Medical Division	٠	• .		 1107 City Hall Annex.
Communicable Diseases .				1107 City Hall Annex.
Child Hygiene				1108 City Hall Annex.
Health Unit				17 Blossom street.
Vaccination Station				17 Blossom street.
Detention Hospital				Southampton street.
Occupational Clinic				17 Blossom street.
Bacteriological Laboratory			1	1101 City Hall Annex.
Examination of Cultures .				4 4 0 4 Oll TT 12 1
Wassermann Tests				4404 Oliv TT 11 4
Food Inspection Division			,	1110 City Hall Annex.
				1110 City Hall Annex.
Examination of Milk and Vin				1104 City Hall Annex.
Inspection of Dairies .				1102 City Hall Annex.
Brighton Abattoir				Market street, Brighton.
Sanitary Inspection Division	n		2	1111 City Hall Annex.
Abatement of Nuisances .				1111 City Hall Annex.
Examination of Gasfitters				1111 City Hall Annex.
Vital Statistics Records and	1 Ac	coui	ıts	1112 City Hall Annex.
Permits for Burial				1112 City Hall Annex.
				•
Superintendent of Peddlers				27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 11 p. m., inclusive, Sundays and holidays, for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

Francis X. Mahoney, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, BULLETIN OF THE HEALTH DEPARTMENT, BOSTON.

VOL. 6.

BOSTON, APRIL, 1917.

No. 4

"It is just as essential to preserve the health of the nation as to win battles at the front."

LET US PREPARE OURSELVES AGAINST INVASIONS OF DISEASE.

Every precaution should be taken this spring and summer to keep our bodies in good physical condition. We are now at a period in the history of our country when preparedness and conservation should mean more than mere words. We should prepare ourselves for the battle against disease and conserve whatever we have in the line of health and health-giving agencies.

With a great war now brought to us and with a full realization of its cost we must of necessity be prepared to do our part in this struggle no matter how large or infinitesimal our allotted share might be.

Our first duty to ourselves and to our country is to keep well because in this way we protect not only ourselves but our neighbors and visitors, and this means much during such a period.

During this critical time when unusual things are being done and strange events are taking place it is but natural that in the evolution of these "novelties" we are apt to become lax or ignorant of things that are new to us and oftentimes unfathomable.

Disease and pestilence are always associated with war and in times past armies and civilian populations have been wiped out by disease given its impetus by one case. A malady brought into a camp or from a camp to a civilian population is likely to do tremendous damage among either group. It has been said that more people are killed by disease than by war and

this should be borne in mind by everyone, soldier, sailor and civilian alike. During the mobilization of troops our shores may become the camping ground of thousands of men who will be preparing to take part in this war and these men will come from all parts of the country. Until they have been taught hygiene and sanitation they are likely to be careless and ignorant. It is therefore to our own advantage to be in the best of physical condition and to practise carefully rules of sanitation and hygiene so that whatever comes we will be prepared to fight it with probable success. If we are well we need not fear to become the cause of any outbreak among the soldiers or the civilian population and our chances of getting infection will be less than our neighbor who is careless and unmindful of the dangers that are about him.

Let us realize the danger of communicable diseases coming by contact or direct infection. It is a serious problem and usually not accorded its full significance until trouble starts, enormous damage is done and we have become deficient physically, financially and economically.

We have seen the ravages caused by disease in European countries, we know the handicap under which a nation labors when it is afflicted in this manner and we appreciate the unhappy results that have accrued in consequence of this carelessness, ignorance and neglect which in themselves are sins against the laws of God and man.

MOBILIZATION CAMPS AND VENEREAL DISEASES.

Within a few weeks one or more large mobilization camps will be established in Massachusetts to put 25,000 to 50,000 young men through a tedious training of several months to make them fit for the rigors of active campaigning. For the most part these soldiers will be unmarried men, all at an age when the sexual impulse will be the predominating characteristic expression under a highly organized military system which will leave no room for individual preoccupation or diversions from the sordid details of camp life. It is useless to presume that the men of America will differ from the men of Europe in this regard, so that unless a preventive campaign is at once started we must expect sexual indulgence to sweep through our mobilization camps thoughout the country just as has been the case in Europe; and in the wake of this promiscuous widespread indulgence will come one of the greatest menaces of the whole war, venereal diseases.

Here then is stern work for the physicians of the country. Undoubtedly the War Department authorities are giving the matter serious consideration, but active work of the most practical kind is necessary without delay.

The Yoshiwara girls opened up extensive quarters at the various mobilization camps at the outbreak of the Russo-Japanese war. As soon as the Japanese authorities realized the harmful influence in the army of these quarters they promptly banished the girls from the camps. This is one very efficient method of keeping the army free from venereal diseases. The British troops undergoing their early training were billeted in large numbers in private houses, but the Government rapidly discovered the grave peril to the troops by this method. In our own Philippine campaign, houses of ill fame were opened within a few feet of the boundary line of the camps, and the same will probably hold true throughout our country now in relation to many army posts.

To date, from a health standpoint most wars have been conducted on a rather go-as-you-please basis. In the Civil War, men were enlisted after a cursory physical examination and sent off to the firing line almost as soon as they could get into their uniforms and get a little practice with the rifle. It took our scientific autocratic enemies to teach the world that this war and any future wars are not going to be "hit or miss" affairs. The whole world has learned the actual necessity of sending into the field only such men as are perfectly sound of body. We have learned that six months' vigorous outdoor training is not too much to put the men from the office or factory into proper condition for active campaigning.

Are we then going to render negligible this intensive physical training? Are we going to permit the health of our million or more soldier boys to be undermined by the spread of venereal diseases?

Are we going to spend hundreds of millions of dollars in getting an army trained under the most scientific methods and then permit the whole structure to be weakened by allowing one of the most virulent contagious diseases in the history of the world to be freely disseminated throughout the ranks by polluted women? It is to be presumed that a very careful physical examination of recruits will give us an army practically free from venereal troubles. Once these men are taken into the army with clean bodies, proper precautions must be taken to keep their bodies clean.

We as a democracy dislike anything compulsory. It conflicts

with our idea of freedom. But we are at war now, in the greatest war of all history, and must draw a distinct line between liberty and liberties. Irrespective of any preconceived notions we may have on the subject of sexual intercourse, either on the moral or physical side of the subject, we might just as well scrap them all now and get right down to cold blooded calculations. We must decide this question of sexual license in a manner free from all hysteria, fear of criticism, or public opinion.

We must keep an army free from venereal diseases.

The Japanese plan mentioned above is a sensible one. The great Kitchener tried the plan of moral suasion and appeal to manhood. This did much good no doubt for the men on foreign soil but certainly not for those billeted in private houses throughout England.

As a war measure in this country a good national house-cleaning would not be a bad idea. Compulsory isolation of those infected with venereal diseases exactly as in the case of smallpox might seem to be a drastic measure but one disease is as bad as the other and this is certainly no time to be swayed by a false aversion of the public toward the discussion or legislation on matters of this kind. A milder course would be to establish a sort of "deadline" several miles distant from the camps and careful examination and scrutiny of soldiers who either on leave of absence or otherwise had been beyond this deadline. It is no doubt going to require the genius of many master minds to solve this problem but the sooner we get at it the better for the nation and the greater will be our success in the war.

There is probably nothing that should spur us on to the most pronounced activity like the grim facts that now stare us in the face in Europe. Venereal diseases have permeated France, England and Germany to an appalling degree, gradually sapping the life blood out of these three countries and leaving an awful toll of misery and disease for posterity in addition to the tremendous burden being piled up through the physical destructiveness of the war. Are we going to leave such a heritage to future generations in this country, or are we going to keep venereal diseases out of the American army?

This is the most vital topic of the day in connection with the coming establishment of the mobilization camps.

The protection of the health of children is the first duty of the Nation.

INCREASED COST OF FOOD A HANDICAP TO HEALTH.

While the high cost of living has been a serious handicap to most people, in general it is the poor that suffer most from the prohibitive prices that prevail and they suffer not only financially and mentally but also physically. We must eat to live and the poor we always have with us, and of this there can be no doubt. Poor people must of necessity purchase goods that are cheap in price but this does not mean that the cheapest foods have the least amount of food value. The contrary is usually true.

It sounds well to write or say "cut out" all luxuries from your table, but the table of the poor man never contained luxuries. The poor have been accustomed to eating beans, stews, fruits, vegetables, bread, milk, butter, eggs, fish, etc., all of which contain proper food values. These articles of food have now become luxuries if prices are to be considered. The proportionate increase in these edibles has been greater than in the ordinary high priced food. Carbohydrates, proteins and fats we all know are essential for the proper nourishment of the body but to administer them in tabloid form to the average man instead of meals would be repulsive to him. As a matter of fact a balanced ration in regular form is preferred and bulky foods, although some are of but little importance in food value, are necessary in order that the stomach perform its proper functions.

With the proposed increase in the cost of milk there is no doubt but what the infants of the poor will suffer in consequence this summer. While the high cost of milk might induce more mothers to nurse their babies this will be offset by the unfed or improperly fed condition of the mothers if they are unable to get good food at suitable prices.

In consequence of high prices there is bound to be a lack of proper food for people, particularly, from a health standpoint, mothers, infants and invalids. Everything possible is being done to reduce infant mortality but prohibitive prices will give us a serious setback in such a campaign. Increased cost of food will in no wise help and while the young and strong go to war, many to be killed, there are many others that will suffer in their peaceful pursuits at home because of conditions that prevail but which the government has promised to remedy.

The maintenance of health is the first duty of the patriotic American.

THE HOUSE FLY - CARRIER OF DISEASE.

As an enemy of mankind, the house fly, or typhoid fly,—carrier of disease,—is the most dangerous animal that exists. It has carried death to more human beings than have all the beasts of prey and poisonous reptiles put together.

It carries the germs of disease on its feet and in its suckingstomach and distributes them wherever it walks, regurgitating them through its proboscis on articles of food, and depositing them everywhere in its excrement — the so-called "fly specks."

Diseases Commonly Carried by Flies.

A disease which it commonly carries is typhoid fever. This disease is also frequently spread by polluted water or milk and other substances, but the house fly is responsible for many thousands of cases. Typhoid is a germ disease. Four per cent of the persons who have had typhoid become chronic carriers of the germs and discharge them in their feces for months and sometimes years after the activity of the disease. From such feces flies carry the germs to exposed food. Typhoid germs will remain alive on various substances for many days, and may remain alive in butter for some months.

Flies are greatly attracted to tuberculous sputum and may carry and distribute the germs of tuberculosis for several days.

Flies carry the virulent germs of anthrax, malignant postule and other germs causing disease. They also carry the eggs of parasitic worms.

Breeding Places.

Flies will breed in almost any fermenting organic matter. In cities probably most of them breed in horse manure at the stables. In the country and in small villages the more or less primitive privies and the deposits of nightsoil that exist there are the breeding places of quantities of flies.

It may be stated here that flies which breed in privies are more dangerous than flies which breed in piles of horse manure, since they are direct carriers of disease germs which are to be found in human feces of infected patients; whereas if they are bred in piles of horse manure the germs which they may get there are not apt to be so injurious to human beings. It is necessary for them subsequently to visit exposed excrement or substances that have been contaminated by it before they get the most dangerous germs.

They will breed in the manure of other animals — not

frequently in cow droppings, since these dry up so rapidly — but in pig manure and manure of other animals when brought together in a mass.

They will breed also in garbage of all kinds, even in old cloth and paper when damp and fermenting; also in brewery waste or in decaying vegetables; in fact, in all sorts of animal and vegetable refuse.

Breeding Time of Flies.

Flies will begin to breed in the spring as soon as the days begin to be consistently and consecutively warm. They will continue to breed until well on into the autumn. The number of generations will depend on the length of the consistently warm season, and there may be, for example, in such a climate as that of Washington, nine or even more generations each year. Further south, where the summer is longer, and particularly where the climate is moist, there may be more generations than this. When cold weather comes, breeding stops, and adult flies pass the winter hidden away in cracks and crevices to emerge the following spring to start a new generation.

Measures of Control.

It is perfectly obvious that in a community control measures must be undertaken by concerted action. In isolated farmhouses or cottages individual families should be able to control the pest of flies. In communities there should be organization. followed by a thorough campaign of education in which, by all means, the school children should be taught everything possible about the house fly. It goes without saving that every fly killed, no matter in what stage, is a gain, but it is much to be doubted whether any striking diminution in the numbers of flies can be brought about by a campaign against adult flies in midsummer, such as has been carried on in a number of cities recently, usually under the auspices of some newspaper or some civic body, with prizes awarded to the child who turns in the greatest number of dead flies. The means productive of best results should be directed toward possible breeding places, especially in the early part of the season. A clean-up day or a clean-up week is an excellent idea.

Treatment of Other Breeding Places.

Remembering what has been said in the preceding paragraphs about other breeding places and that these include all refuse

which tends in any way to ferment, the plain remedy is to get rid of such refuse, by earting it away, by burning it, or treating it with kerosene or borax. It is impossible to leave trash about and avoid flies. Clean up everywhere.

"BRONCHO=PNEUMONIA" AS A CAUSE OF DEATH.

The following letter received by this department from the Census Bureau should be carefully observed by physicians in this city:

"Permit me to call your attention to the following figures which show that the local registrars are failing to secure the real causes of deaths on certificates returned by physicians as broncho-pneumonia. This Bureau does not contend that broncho-pneumonia is not a separate and distinct disease, but it is so often a sequela of others, especially of the infectious diseases, that during 1914 and 1915 certificates on which broncho-pneumonia (unqualified) was given as the cause of death were returned to the physicians with a form letter. A tabulation of the replies is given below:

1,035	5,300 979
225	
01 =	
21.7	18.5
41	207
52	175
51	207
10	28
6	32
27	164
38	166
	$\begin{bmatrix} 52 \\ 51 \\ 10 \\ 6 \\ 27 \end{bmatrix}$

[&]quot;You are urged, therefore, to query all deaths stated to be due to broncho-pneumonia (unqualified) in order to procure more accurate results in your own office and to add the information obtained to the certificates so that the transcripts for this Bureau will be complete. Whenever you find that the broncho-pneumonia is primary, please write the word 'primary' on the margin of the certificate opposite the cause of death. It would not then be necessary for the Bureau of the Census or the Health Department to trouble the physician further in regard to the case.

[&]quot;Physicians signing death certificates are requested to do this rather than wait for this department to query them."

CANCER MORTALITY.

Mortality from Cancer by Organs and Parts in 12 American Cities, 1911-1916.

		DIFFERENCE IN RATE TO THAT OF 1911-15.							
	1911.	1912.	1913.	1914.	1915.	1911-15.	1916.	Actual.	Per Cent.
Buccal cavity	3.4	3.4	3.6	3.6	3.5	3.5	3.5		
Stomach and liver,	31.4	32.5	32.6	33.2	33.6	32.7	33.8	+1.1	3.4
Peritoneum:									
Intestines	11.6	11.5	12.4	12.9	12.2	12.1	13.3	+1.2	9.9
Female generative organs	12.3	13.2	13.1	12.9	13.8	13.1	13.3	+0.2	1.5
Breast	7.7	7.4	7.4	8.1	7.4	7.6	8.5	+0.9	11.8
Skin	1.3	1.6	1.4	1.5	1.9	1.5	1.7	+0.2	13.3
Others	13.8	13.8	14.5	14.8	15.9	14.6	15.9	+1.3	8.9
Totals	81.5	83.4	85.0	87.0	88.3	85.1	90.0	4.9	5.8

Mortality from Cancer, in Detail, in 12 American Cities, 1906=1916.*

Cities.	RATES PER	100,000 of I	OPULATION.	DIFFERENCE IN RATE TO THAT OF 1911-15.			
011220	1906-10.	1911-15.	1916.	Actual.	Per Cent		
New York City	75.1	82.1	83.9	1.8	2.2		
Chicago	76.2	83.8	90.2	6.4	7.6		
Philadelphia	83.1	91.5	99.7	8.2	9.0		
St. Louis	80.2	92.8	91.1	-1.7	-1.8		
Boston	101.7	114.8	114.6	-0.2	-0.2		
Cleveland	66.7	77.5	85.3	7.8	10.1		
Baltimore	87.4	101.1	107.5	6.4	6.3		
Detroit	64.9	73.7	78.2	4.5	6.1		
Los Angeles	95.8	100.1	102.4	2.3	2.3		
San Francisco	108.9	123.5	131.2	7.7	6.2		
Buffalo	82.1	96.2	99.5	3.3	3.4		
Milwaukee	69.0	76.1	85.7	9.6	12.6		

^{*} The "Spectator."

Most of the diseases from which man suffers are peculiar to man.

WHEN HOUSE=HUNTING THE FOLLOWING FACTS SHOULD BE BORNE IN MIND.

Is every living room provided with sufficient window space to insure good light and ventilation?

Are the walls clean and is the paper and paint in good condition?

Are toilet and bathing facilities handy, and is the apartment clean and well ventilated?

Is the plumbing in good condition, and are the fixtures open? Are all rooms free from dampness?

Is the cellar concreted, dry, clean, whitewashed and properly ventilated?

Are the hallways well ventilated, clean and lighted day and night?

Is there a good yard or piazza where children can play?

What are the means of escape in case of fire, and are any stables or offensive businesses nearby?

AFTER SELECTING A HOUSE OR APARTMENT WITH THE ABOVE REQUISITES, THEN KEEP YOUR FAMILY HEALTHY—

By giving them wholesome and well cooked food.

By letting plenty of sunshine and air into the rooms during the day and opening the sleeping room windows at night.

By keeping the toilet and living rooms very clean.

By allowing no garbage or rubbish to collect, and by keeping the garbage receptacles clean, water-tight and properly covered.

By screening doors and windows to keep out all flies.

By training the children to wash their hands before eating, and after using the toilet.

STOP WASTE IN HEALTH DEPARTMENT SUPPLIES.

Owing to war conditions, the State Department of Health finds a growing difficulty in obtaining supplies for the manufacture and distribution of diphtheria antitoxin and vaccine virus. There is, in particular, a shortage of bottles for antitoxin. All physicians throughout the state are therefore urgently requested to search for antitoxin bottles and return them to the Antitoxin and Vaccine Laboratory, Forest Hills, Mass.

There is another suggestion to physicians which might not be amiss at this time. We all realize that there is a constant increase in price for nearly every commodity, and this applies in every way to supplies purchased and dispensed by the city, in most instances without charge. In this department, for instance, where so many pamphlets, circulars, report blanks, prepaid post-cards, culture outfits, etc., are distributed, care should be exercised by the physician that none of this material is wasted, burned or thrown into rubbish barrels. What is not used should be returned to this office. This suggestion should be considered in the manner that it is given, because, after all, it is the citizen who pays for these necessities, and what is saved by the physician in this regard is a saving to the citizen, who is the taxpayer.

MEETING OF MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH.

The regular quarterly meeting of the association was held at the Brunswick Hotel Thursday, April 26.

After luncheon and the business session the meeting was given over to a full and practical discussion of the relation of state and local boards of health to general preparedness. The discussion was opened by Dr. Allan J. McLaughlin, Commissioner, State Department of Health, followed by Dr. Harold C. Ernst, Professor of Bacteriology, Harvard Medical School, and Col. W. P. Chamberlain, Surgeon U. S. A., Fort Banks.

Doctor McLaughlin's opening paragraph was as follows:

"The matter of hygiene and sanitation incident to a state of war simply enhances the importance of the problem of hygiene and sanitation in time of peace. This problem of hygiene and sanitation splits itself into two very unequal parts squarely; first, the hygiene and sanitation of the soldier and sailor, the fighting units, and second, the hygiene and sanitation of the civilian population, including all the exempt groups. You will naturally see, gentlemen, that the larger part of this

problem, after all, is the hygiene and sanitation of the civilian population, and if health officers and trained sanitarians are valuable and necessary in time of peace they are doubly valuable and necessary in time of war. The hygiene and sanitation of the soldier and the sailor will be adequately cared for by the very excellent Medical Corps of the United States Army and the Medical Corps of the United States Navy, with their reserve forces, and they will probably have their hands full to take care of this job: there is not any doubt about that. And the other, the larger part of the problem, is your problem, gentlemen, and my problem. It is the problem which we handle 365 days in the year in time of peace, and which we will have to keep on handling in time of war, with its added difficulties and complications. I feel certain that the local boards of health appreciate this fact. They do not feel because there is a state of war that their obligations or duties are lessened in any way. I think they all feel that they are increased, that they are to keep on doing their work."

INFORMATION FOR DISEASE AND DEATH REPORTS AND CERTIFICATES.

The following letter written by the Director of the Census is a timely suggestion that should be observed by physicians in this city:

More accurate and definite statements of the occupations of decedents should be written upon death certificates. Until this is done mortality statistics by occupations will continue to be unsatisfactory.

The Bureau of Census is planning for the near future a monograph on tuberculosis. How much more valuable this monograph will be if it is possible to show accurately the occupations of decedents.

As a physician you appreciate the importance of such statistics. As a physician you are by education better qualified than the ordinary informant to understand a proper statement of occupation.

Although you are not now called upon by law to fill in this part of the death certificate-your supervision of this item will beyond question result in much more accurate and valuable statements of occupations and will prove of tremendous importance in public health work.

Will you not, therefore, take pains to see that the occupation items upon each one of your death certificates are properly supplied?

This applies also in the case of death certificates and communicable disease reports where frequently much valuable information required for statistical purposes is omitted by physicians. This data is necessary for complete records, and much inconvenience, delay and expense is entailed in writing and telephoning these delinquent physicians for the missing facts which should be incorporated in the original report.

BOSTON FLOATING HOSPITAL SEASON OPENS.

The Boston Floating Hospital opens its season on Thursday, June 28. Active work in cleaning and renovating is in progress and preparations are being made for the usual ministrations of this institution to the sick children and tired mothers of Greater Boston. As in previous years the hospital boat will leave each morning at 9 a. m. from its berth at North End Park, Commercial street, returning at 4.30 in the afternoon to discharge its patients, retaining, as it has for a number of years, the sick patients classed as permanent patients through the night. In addition to the work done for the patients on the boat there is an energetic and enthusiastic "on shore" follow-up work among the families sending children to the hospital.

This most practical and worthy charity for sick children is open to all infants in the city. Applications for an outing should be made before 8.30 a. m. of the day of sailing. Critical cases are taken at any time. Children suffering from communicable diseases are not allowed on board the boat.

LOBAR PNEUMONIA NOW REPORTABLE.

THE COMMONWEALTH OF MASSACHUSETTS.
STATE DEPARTMENT OF HEALTH.

The State Department of Health at a meeting held April 3, 1917, *Voted*, That the list of diseases declared dangerous to the public health within the meaning of sections 49, 50 and 52 of Revised Laws 75, as amended, be further amended by adding *lobar pneumonia*, beginning May 1, 1917, so that the said list now reads as follows:

Actinomycosis.

Anterior poliomyelitis.

Anthrax.

Asiatic cholera.

Chicken pox.

Diphtheria.

Dog-biting (requiring antirabic

treatment).

Dysentery:

a. Amebic.

b. Bacillary.

Epidemic cerebrospinal meningitis.

German measles.

Glanders.

Hookworm disease.

Infectious diseases of the eye:

- a. Ophthalmia neonatorum.
- b. Suppurative conjunctivitis.

c. Trachoma.

Leprosy.

Malaria.
Measles.

Mumps. Pellagra.

Plague.

Pneumonia (lobar only).

Rabies.
Scarlet fever.

Septic sore throat.

Smallpox.
Tetanus.
Trichinosis.

Tuberculosis (all forms).

Typhoid fever.
Typhus fever.

Whooping cough.

Yellow fever.

REPORT OF THE HEALTH UNIT FOR THE MONTH OF APRIL, 1917.

Health Department.

Visits made by m	edica	l ins	spect	or:						
Contagious.										52
Tuberculosis										12
Ophthalmia										7
Miscellaneous										9
Total .										80
Cases visited by r	nurse	s:								
Medical .										268
Babies	٠									305
Total .										573
Defective sanitary	7 001	ditio	ne f	Ollno	l in t	onor	non+	hous	000	16
Calls by district p									es,	154
Cans by assured t		Oldli	1101		SUOII	10101		J. J	٠	101
Instruct	ive l	Dist	rict	Nui	sing	Ass	ocia	tion	•	
Visits made by nu					_					630
F	Baby	Hv	gien	e As	ssoci	atio	n.			
Total number of l	_									155
New babies admir										20
Babies readmitted	1.									1
Conferences held										4
Total conference	atten	dan	ce							213
Home visits by n	urses									316
Associated										
Cases investigated	dand	l ass	isted	l .						. 4
Consu	mpt	ives	, Ho	spit	al D	epa	rtme	ent.		
Calls by nurses in	dist	rict								672

SUMMARY OF VITAL STATISTICS.

There were 1,037 deaths reported in the four weeks ending April 28, against 984 in the corresponding period last year, a death rate of 17.50 against 16.87.

Reported deaths of nonresidents numbered 148 against 115 last year.

Of deaths from reportable	dise	ases	the	pri	inci	pal d	ecreas	es
were:								
Tuberculosis (all forms)								16 6
		•			•		•	
and the principal increase was								
Diphtheria								4
Other important differences v Decreases:	vere:							
Heart disease and nephritis .								54
Accidental and violent								8
Premature birth								6
Increases:								
Pneumonia								36
Cancer								19
Erysipelas								12
Puerperal diseases								6
Other causes	•							64
There were 17 more death	hs un	der	1 v	ear.	16	more	e und	er
5 years, and 19 more over 60			J	,				
MORTALITY FOR THE FOU	ID W	FEK	S 1	ND	SA	ME D	EDIO	D
	1910		S	IND	SA.	WILL F	LKIO	D
AL.	, ,,,,,	,				1917.	191	6.
Total deaths						1,037	9	84
Nonresidents						148	1	15
Nonresidents						148 17.50	1 16.	15 87
Nonresidents	ted)					148 17.50 15.00	1 16. 14.	15 87 90
Nonresidents	: cted)					148 17.50 15.00 160	1 16. 14.	15 87 90 43
Nonresidents	: cted) :			· · · · ·		148 17.50 15.00 160 203	1 16. 14. 1	15 87 90 43 87
Nonresidents	eted)			· · · · · ·		148 17.50 15.00 160 203 225	1 16. 14. 1 1 2	15 87 90 43 87 22
Nonresidents	eted)			· · · · · ·		148 17.50 15.00 160 203	1 16. 14. 1 1 2	15 87 90 43 87
Nonresidents	: cted) : : :					148 17.50 15.00 160 203 225 346	1 16. 14. 1 2 3	15 87 90 43 87 22
Nonresidents	cted)	DEA				148 17.50 15.00 160 203 225 346	1 16. 14. 1 2 3	15 87 90 43 87 22 27
Nonresidents	cted)					148 17.50 15.00 160 203 225 346 1917.	1 16. 14. 1 1 2 3	15 87 90 43 87 22 27
Nonresidents	: cted) :					148 17.50 15.00 160 203 225 346 1917. 3 23	1 16. 14. 1 1 2 3	15 87 90 43 87 22 27
Nonresidents	cted)					148 17.50 15.00 160 203 225 346 1917. 3 23 6	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19
Nonresidents						148 17.50 15.00 160 203 225 346 1917. 3 23 6 3	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5
Nonresidents		DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4
Nonresidents		DEA	· · · · · · · · · · · · · · · · · · ·			148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4
Nonresidents		DEA	· · · · · · · · · · · · · · · · · · ·			148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90	1 16. 14. 1 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 19
Nonresidents		DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90 10 1	1 16. 14. 1 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 7
Nonresidents		DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90	1 16. 14. 1 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 19
Nonresidents	cted) cted) control control	DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90 10 1 50	1 16. 14. 1 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 119 7 58
Nonresidents	cted) cted) creditis a	DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90 10 1 50 174	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 7 19 7 58 28
Nonresidents	cted) cted) creditis a	DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90 10 1 50 174 10	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 7 19 7 5 88 98 98 99 99 99 99 99 99 99 99 99 99
Nonresidents	cted) cted) creditis aras)	DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90 10 1 50 174 10 85	1 16. 14. 1 2 3	15 87 90 43 87 22 27 16. 4 19 4 5 4 97 119 7 58 28 9 66
Nonresidents	cted) cted) creditis (creditis	DEA				148 17.50 15.00 160 203 225 346 1917. 3 23 6 3 8 90 10 1 50 174 10 85	1 16. 14. 1 2 3	15 87 90 43 87 222 27 16. 4 19 4 5 4 97 7 7 58 9 66 12

						1917.	1916.
Old age						4	2
Pneumonia .						180	144
Premature birth						21	27
Puerperal diseas	es					15	9
Other causes .						313	249

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending April 28, 1917.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

	Tomes	Ciama	TOTAL	Drumm		Nonre	ONRESIDENTS.			
	TOTAL	CASES.	TOTAL	DEATHS.	CA	SES.	DEA	THS.		
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.		
Diphtheria	295	235	23	, 19	47	33	9	4		
Scarlet fever	162	215	3	5	39	51		2		
Measles	831	719	6	4	4	4	1			
Typhoid fever	19	12			1	1				
Whooping cough	21	128	1	7				1		
Tuberculosis (all forms)	259	245	100	116	35	15	7	15		
	CEN	NTDAI	DIV	ISION.	1		11			
Prosecutions authorize	7	, , ,						3		
Stable hearings								7		
Premises ordered vaca								3		
Miscellaneous orders								3		
Application Lying-in-I								1		
Forcible removals orde						٠		5		
Stable permits granted					•	. 1		2		
Dump permits					•			3		
Dump permit revoked					٠	•		1		
Undertaker approved			•		•	٠	•	1		
Todaina houses contif			Per	mits.				11		
Lodging houses certification Grease (licenses to ren			٠		•			7		
Vehicles inspected and	love)	· ·	٠	•	•	•		603		
Permits to conduct of	fansive	husin			•	•		3		
Licenses to peddle fru					•			150		
Manicure — Massage								11		
Hen permits								1,239		
Dump permits								4		
Numbers assigned .				- 0,				167		
Stable licenses granted								2		
Undertakers appointed	d.							211		
Manure permits .								5		
Grease permits .								55		
		((98)							

MEDICAL DIVISION.

Communicable Diseases.

Number of visits by medica		ector								1 074
Antitoxin given	ı iiisp	COUOI	S		٠	•				34
Deaths investigated	•	`	•	•	•	٠				27
Antitoxin given Deaths investigated Cases brought to Boston for Vaccinations Vaccination certificates	r trea:	tmen:	f.	•	•	•			•	94
Vaccinations	· ULCA	uncn	U	٠	•	•				26
Vaccination contificates	•		•	•	•	•	•			9
Antityphoid vaccine admini	et arac	1	•	•	٠	•			•	1
Antityphoid vaccine admini Forcible removals recommen	ndod	1			•		٠		•	4
							•	٠	•	4
	blic									
Communicable disease visits	З,									5,581
Number of revisits (infants)										691
Number of new babies visit	ed									3,293
										0.545
Total visits by nurses	•		•	٠	٠	•	•	٠	٠	9,545
BACTERIO	DLOC	iICA	LL	AB	ORA	TO	RY.			
Examination	ıs foı	Dia	gno	sis	and	Re	lease			
Diphtheria										1,643
Tuberculosis										356
Typhoid										79
Syphilis										656
Gonorrhea										402
Gonorrhea Other examinations * .										140
Bacteriological milk examin	ation	3 .								468
T. B. Comp. Fix. Test .										656
Anthrax										1
Para-typhoid									,	2
Pneumonia										1
			DE C	TIO	. N. T					
	OOD					A 1-	-44-9			
Live Stock In										100
Cattle inspected							•	•	٠.	169
Calves inspected	•	•	• .	٠	٠	٠	:			11,744
Sheep inspected							٠	٠	•	8
Swine inspected	٠			٠		•	•			2,697
Animals condemned, whole			•	٠	٠	•	٠	٠	•	
Parts condemned				٠		٠	٠	٠	•	181
Stores inspected	•		•	٠	•		٠	٠	٠	945
Court case					•	٠		•	•	1
Fines			٠	*			٠			\$50
MI	ILK	INSF	PEC	ΓΙΟ	N.					
(Examinations	as t	o St	atut	e R	egu	iren	nent	s.)		
Samples examined:								,		
Chemical examinations of	milk									1,318
Bacteriological examination	ons of	milk								
Bacteriological examination Chemical examinations of	vines	rar								
Chemical examinations of	butte	er and	d che	eese						145
Number of court cases .										86
Fines										\$1,295
										,_,_

^{*}Examination of rats, 66; Genito-Urinary Tuberculosis, 8; Ophthalmia, 59; Malaria, 1; K. L. virulence, 2.

Inspection of Provisions - Articles Condemned

inspection of Provisions	— Articles Condemned	•							
Meat and Fish:	Meat and Fish:								
Poultry 464 pounds		30 pounds							
Pork 250 pounds	Miscellaneous:	50 pounds							
271.7									
z zz-	Finnan haddie .	2							
Haddock 10 pounds		82 pounds							
Beef 2 pounds	Olives 1,0	00 pounds							
Hamburger 2 pounds	Turnips 9	60 pounds							
Lamb 14 pounds	Cabbage 2	80 pounds							
MORBIDITY AND MORTALIT	TV FOR 17 WEEKS O	F 1917.							
MORDIDITI AND MORTALI	1917								
Total deaths									
		,							
Nonresident deaths									
Deaths under 1 year of age									
Pneumonia	84								
Cancer									
Heart disease	61	4 674							
Diarrhea and enteritis under 2 years	4	6 53							
•									
DEATHS FROM COMMUNIC	ARIE DISEASES FOR	SAME							
PERI									
PEKI	OD.	1917. Non-							
	1917. 1910	6. residents.							
Diphtheria	84 9	2 25							
Scarlet fever	, . 20 2	2 7							
Measles	11 2	8 1							
Typhoid fever	—	6 4							
TTT 1 1 1	~ 0	_							
	101 17								
Tuberculosis	404 413	5 00							
GLORG OR COMMINICATION PROPERTY PROPERTY									
CASES OF COMMUNICABLE DISEASES REPORTED. (17 Weeks.)									
(17 ***	eks.)	1917. Non-							
	1917. 1916	Non- c. residents.							
Diphtheria	1,242 96'	$7 \qquad 224$							
Scarlet fever	658 1,054	1 144							
Measles	2,377 2,023	3 20							
Typhoid fever		3 8							
Whooping cough	TO TO								
m 1 1 ·	946 908								
Tuberculosis	940 900	101							
SANITARY II	NSPECTION.								
New reports		. 5,273							
		100							
New tenement house reports		00=							
Legal notices recommended		. 807							
Reinspections		. 6,892							
Nuisances reported		. 9,591							
Complaints investigated		. 1,338							
Number of court cases		. 5							
Fines		. \$20							

SUMMARY OF RATES.

Birth and Death Rates per 1,000 of Population, 1901-1916.

	1901-05.	1906-10.	1910–11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	26.0
Deaths (excluding stillborns)	18.75	17.88	17.08	16.17	16.10	15.76	16.06	16.8
Smallpox	.095	.0003	.001					
Measles	.124	.127	.107	.154	.105	.083	.053	.141
Scarlet fever	.153	.104	.107	.044	.105	.087	.106	.051
Diphtheria and croup	.387	.265	.180	.142	.212	.225	.291	.243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.091
Typhoid fever	.224	.160	.091	.079	.082	.088	. 053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	.639	.605	.468
Diarrhea and enteritis (all ages)	1.112	1.033	1.139	.911	.837	.731	.711	.551
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.462
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.10

Births estimated by Registry Department.

MONTHLY METEOROLOGICAL SUMMARY, APRIL.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.) Mean, 29.94; highest, 30.36; date, 17; lowest, 29.28; date, 6.

TEMPERATURE.

Highest, 72; date, 23; lowest, 26; date, 10; greatest daily range, 23; date, 14; least daily range, 2; date, 2; normal for month, 45.3.°

PRECIPITATION.

Total this month, 2.72; snowfall, 9.1; greatest precipitation in 24 hours, 1.23; date, 6, 7; snow on the ground at end of month, 0.0; normal for this month, 3.55.

WIND.

Prevailing direction, northwest; total movement, 7,363 miles; average hourly velocity, 10.2; maximum velocity (for five minutes), 33 miles per hour from northeast, on 10th.

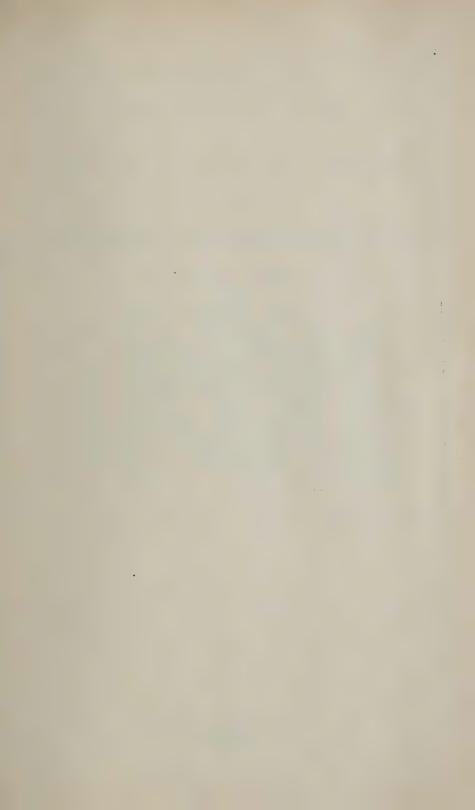
WEATHER.

Number of days clear, 10; partly cloudy, 6; cloudy, 14; on which .01 inch or more of precipitation occurred, 11.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 1, 5, 24; lunar, 1, 15; hail, 0; sleet, 0; fog, 19, 21; thunderstorms, 21; frost: light, 0; heavy, 0; killing, 0.





HEALTH DEPARTMENT MEDICAL DIVISION

FREE VACCINATION

The Health Department has established a Vaccination Station at 17 Blossom Street, near Cambridge Street, West End, where all persons residing in Boston may obtain vaccination free of charge every day between the hours of nine and twelve in the forenoon, and two to five in the afternoon, Sundays and Holidays excepted, and on Saturdays between nine and twelve in the forenoon.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

			Popu	ilation	760,400	
Births				. * 19,750	Birth rate	. 26.0
Deaths				. 12,760	Death rate	. 16.78
	Of	these	total	deaths 14.1	per cent were nonresiden	ts.

* Estimated by Registry Department.

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

					_	
C	ommissioner of Health.					
	Secretary	٠				1109 City Hall Annex.
	Publications					1109 City Hall Annex.
	Publications Licenses		6			1109 City Hall Annex.
	Medical Division					1107 City Hall Annex.
	Communicable Diseases .					1107 City Hall Annex.
	Child Hygiene				٠	1108 City Hall Annex.
	Health Unit				٠	17 Blossom street.
	Vaccination Station					17 Blossom street.
	Detention Hospital					Southampton street.
	Occupational Clinic		٠	٠	٠	17 Blossom street.
	Bacteriological Laboratory					1101 City Hall Annex.
	Examination of Cultures .			٠,		1101 City Hall Annex.
	Wassermann Tests					1101 City Hall Annex.
	Food Inspection Division					1110 City Hall Annex.
	Inspection of Foodstuffs .				٠	1110 City Hall Annex.
	Examination of Milk and Vir	negar				1104 City Hall Annex.
	Inspection of Dairies .					1102 City Hall Annex.
	Brighton Abattoir	•	٠	•	٠	Market street, Brighton.
	Sanitary Inspection Division					1111 City Hall Annex.
	Abatement of Nuisances .				4	1111 City Hall Annex.
	Examination of Gasfitters	•	•	•	٠	1111 City Hall Annex.
	Vital Statistics Records and	1 Ac	cou	nts		1112 City Hall Annex.
	Permits for Burial			٠		1112 City Hall Annex.
	Superintendent of Peddlers					27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 11 p. m., inclusive, Sundays and holidays, for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

Francis X. Mahoney, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, MAY, 1917.

No. 5

"When war is raging the laws are dumb."

SUMMER ILLNESSES: CAUSES AND PREVENTION.

The common diseases that usually occur in the hot or summer months are: Ordinary diarrhea, acute enteritis (inflammatory diarrhea), and cholera morbus in adults, the latter disease in children being designated as cholera infantum.

As to the causes of these diseases, fresh fruits, certain vegetables containing an abundance of cellulose, and berries having small seeds, may readily cause an attack of diarrhea in certain persons. Foods, as fish, shellfish, cheese and milk, may easily undergo decomposition in the bowels, or may contain preformed products of decomposition, particularly in hot weather, and thus may excite more or less acute or violent diarrhea. Various micro-organisms have been found in association with eases of this sort.

Prophylaxis is of great importance. The avoidance of irritating or tainted foods, particularly during hot seasons of the year when decomposition is apt to occur, is the most important measure. Uncooked fruit, shellfish of various sorts, berries and cold drinks are among the articles of diet to be scrutinized with greatest care. Residents of hot climates have found it advantageous to wear an abdominal band of flannel or some woven material to secure warmth and protection, particularly when cool nights succeed hot days.

Acute intestinal catarrh (enteritis) is more common in hot weather and in hot climates than at other times or elsewhere, owing to the greater likelihood of the contamination of food in these circumstances, and because certain easily tainted foods, like fruit, are more commonly used. In childhood, chilling of the surface of the body during cool nights following hot days, plays some part in the etiology.

Especially injurious in acute enteritis are raw fruit, ice-cold beer, fresh cucumbers, sour potatoes and meat preparations, especially in summer.

Over-ripe fruit is almost if not quite as harmful as unripe fruit.

The causes of diarrhea in children are practically the same as those in adults, but the difference in the character of the food, in the routine of life, and in susceptibility, give a greater prominence to certain conditions.

Among the causes of diarrhea in children are overfeeding, too much fat in the milk, the use of tainted milk, of too strong milk mixtures, unripe or spoiled fruit, and, at times, water may prove the source of infection, either directly, when given the child to drink, or indirectly, by using impure water for washing milk cans or bottles.

In hot seasons of the year all forms of food, but particularly milk, should be kept with the strictest care. When children are bottle-fed, the food, if prepared in the morning for the whole day, should be kept in the refrigerator. Careful pasteurization is often necessary when the freshness of the milk is doubtful. In the early morning some other form of food, such as barley water or prepared foods, may be used with advantage until the new supply of milk for the day has been received. In the cases of older children rigid care should be taken to avoid the use of stale foods of all sorts.

The susceptibility of the child may be lessened by the avoidance of exposure. In the summer, when the nights are relatively cool, care in the dress is of importance, particularly the protection of the abdomen and legs.

This epidemic type of diarrhea is more or less prevalent in the latter part of summer and early autumn, especially if the weather has been hot for a prolonged period. It is known by various names indicative of its etiology and characters, viz., infective, inflammatory, febrile, toxic or fermental, or epidemic diarrhea; zymotic or epidemic enteritis; cholera infantum, cholera nostras, English cholera or choleraic diarrhea. Summer diarrhea should not include all cases of diarrhea occurring in summer. The name might be limited to that class of case in which no serious anatomical changes are found in the mucous membrane, even in fatal cases, except those of an inflammatory or ulcerative nature secondary to prolonged attacks. On the other hand, epidemics of infective colitis or ileo-colitis occur in which profound changes are found in the colon. Probably the distinction is merely dependent on the nature of the infective

organism. In both classes the treatment is essentially the same. In some instances the attack is due to toxins ingested in the food. More often the toxins are formed in the intestinal tract or in the blood and tissues by organisms after ingestion. Thus we may have to deal with a pure toxemia, a blood infection, or a combination of infection and toxemia.

Although summer diarrhea occurs at any age, it is far more common and much more severe in infants from three months to two years of age, and is rarely dangerous after the fifth year. Flies act as carriers of the infective organisms to the food, or more directly to the child's lips and nostrils.

In babies artificial feeding and dirt are the chief factors, Attacks are relatively rare, and not often severe, in breast-fed infants and among those in good social surroundings. Among the poor, milk is often of bad quality, lacking in freshness, contaminated before and after it is bought, given in unsuitable proportions and improperly prepared, and in bottles dirty or imperfectly cleaned. The child's clothing is dirty, its "comforter" hangs by a dirty string and makes frequent excursions to a still dirtier floor, perhaps being cleaned by suction in the mouth of a mother or sister with carious teeth; and on a hot day flies are numerous and infected dust is freely blown in from the street. No wonder the disease is prevalent; the marvel is that any slum child escapes. Probably slight attacks induce immunity and the fittest survive.

ANTHRAX IN BOSTON.

Anthrax is primarily a disease of animals, such as cattle and sheep, but is transmitted to those who are employed in the handling of green or raw hides.

Warring conditions have brought to factories enormous orders for shoes to outfit the soldiers. To supply enough leather to provide these shoes all parts of the world are scoured for hides, even India and China. Although there are no tanneries in this city, and but few shoe factories, the hides are, nevertheless, unloaded here from the vessels prior to shipment to the tanneries and factories.

The cases of anthrax reported in this city during the past few years have been confined for the most part to teamsters, longshoremen, stevedores and others directly concerned in the handling of the skins.

In man, contagion commonly occurs through an abrasion of the skin, resulting in the so-called "malignant pustule" or in "malignant edema." Pulmonary anthrax is a less frequent but almost invariably fatal form of the malady, caused by inhaling dust or particular hair or wool from the diseased animals. In rare cases the spores find entrance to the digestive system and produces a gastro-intestinal attack.

The frequency of animal anthrax in certain countries is explained not only by the absence of precautionary measures, the most urgent of which are preventive vaccination, complete destruction of carcasses and rational disposal of waste products of manufacture but also by conditions of soil and temperature.

The persistency of this germ may be well illustrated by a case in a neighboring state where the washings from a tannery drained to a meadow nearby. In the following year cows grazed on this land and in a short time the herd became infected with anthrax and died of the disease.

Another instance of infection came from a shaving brush, the bristles of which came from an infected animal.

The usual treatment of anthrax in man has been to remove the growth by a surgical operation. A serum has recently been produced which promises to be successful. By this method no surgical operation should be performed.

Since 1913 up to the present date there have been reported in this state 80 cases of anthrax, 22 of this number having been reported since January 1 of this year, 9 of them in Boston. Last year most of the cases reported throughout the state were in people working in tanneries in the different parts of the state where these industries were located. In 1916 Boston reported 5 of a total of 31.

CASE OF LEPROSY REPORTED.

A mild case of leprosy in the person of an adult male, born in Turkey, was reported during the month. This man came to the country about one year ago and has lived in this state since that time. The diagnosis was made at the Massachusetts General Hospital, microscopically. There were no open lesions. The man was removed to the Detention Hospital of this department and later sent to Penikese Island.

SMALLPOX IN MASSACHUSETTS.

Many cases of smallpox have been reported in cities and towns in the Commonwealth. Thus far this year Boston has escaped a visit by this disease. As a warning to citizens the Health Commissioner sent the following notice to all physicians in this city and to the fifty-two branch telephone exchanges in the metropolitan district. The Health Department is willing at all times to do vaccinating at its station on Blossom street. Physicians are urged to coöperate with this department in its efforts to prevent smallpox from entering this city and gaining a foothold.

"Many cases of smallpox have been found in the state, new cases are appearing and the disease may be brought to this city at any time.

Each case of smallpox affects not only the individual but is a distinct menace to the community as well.

All persons not protected by successful vaccination are liable to contract smallpox. Every case of smallpox is a distinct menace to the community and does not simply affect the individual alone.

You can help the city to be prepared to resist this disease by being vaccinated or revaccinated. Unvaccinated persons, including all children, should be vaccinated.

The duration of protection from a previous vaccination is uncertain. If not performed comparatively recently revaccination is the best test. If vaccination "takes," the need is evident. If it does not "take," the application of the virus causes no inconvenience.

Call your physician at once if any eruption appears on the skin. Consult your physician about revaccination."

CHANGE OF CLIMATE AND TUBERCULAR PATIENTS.

In a recent article in the U. S. P. H. S. bulletin the following things are emphasized as important when a consumptive is contemplating a change of climate:

First. Expense.

Second. Food.

Third. Work.

Fourth. Medical supervision.

Fifth. Absence of family and friends.

A favorable climate for a consumptive is one that is not too warm. A moderately cool atmosphere is invigorating, while a too warm one is depressing. Very cold weather, on the other hand, makes the living of an outdoor life more difficult and less attractive. Moderately cool atmospheric conditions are those to be sought.

No locality has a climate that is favorable all the year, and most localities in the United States have favorable climates for a considerable portion of the year if one will only take advantage of them.

In quest of a favorable climate the individual must not forfeit suitable food, rest and peace of mind, or gain a more favorable atmosphere in which to live at the price of homesickness and worry.

The consumptive can usually obtain the most favorable conditions for recovery, including an outdoor life, by obtaining a suitable atmosphere or climate during many hours of the day, by avoiding overheated or crowded rooms, and by sleeping on a porch in all ordinary weather, and in a room with open windows when it is very cold or stormy.

Leaving home, except to go to a sanatorium, is fraught with much danger, unless one is financially able to meet all possible demands, and it should be most carefully considered even then.

APPLES, BUTTER, CHEESE AND EGGS IN COLD STORAGE.

The monthly report of the Office of Markets and Rural Organization, Department of Agriculture, shows cold storage holdings of apples, creamery butter, eggs and cheese as follows:

Apples.—163,806 barrels and 221,122 boxes of apples were reported in 569 storages on June 1. The total holdings reported by 447 storages were equivalent to 216,464 barrels, which compares with 303,584 barrels June 1, 1916, a decrease of 28.7 per cent. The report shows only 5.1 per cent of the December 1 holding still remaining in the coolers.

Creamery Butter.— 8,942,120 pounds of creamery butter were reported in 292 storages June 1. The total holdings reported by 217 storages were 8,431,140 pounds, which compares with 7,016,721 pounds June 1, 1916, an increase of 20.2 per cent. The reports of 263 firms show that their holdings increased 6,222,965 pounds, or 240.5 per cent, during May this year, as compared with the increase reported by 173 firms of 5,695,607 pounds, or 535.1 per cent, during May last year.

Eggs.-4,549,758 cases of eggs were reported in 369 storages June 1. The total holdings reported by 279 storages were 4,229,853 cases, as compared with 4,593,107 cases June 1, 1916, a decrease of 7.9 per cent. The reports of 323 firms show that the holdings increased 2,621,856 cases during May,

as compared with the increase of 2,140,018 cases during May last year as reported by 236 firms.

American Cheese.— 10,070,577 pounds were reported in 350 storages June 1. The total holdings reported by 223 storages were 7,860,024 pounds, as compared with 7,300,893 pounds June 1, 1916, an increase of 7.7 per cent. The report shows that the holdings increased 27.7 per cent during May, as compared with the increase of 16.3 per cent during May last year.

COTTAGE CHEESE — AN INEXPENSIVE MEAT SUBSTITUTE.

Cottage cheese is one of the important meat substitutes, say specialists of the United States Department of Agriculture. It contains a larger percentage of protein (the chief material for body building) than most meats and furnishes this material at a lower cost. In every pound of cottage cheese there is about one fifth of a pound of protein, nearly all of which is digestible. Meats, on the other hand, usually contain less protein and besides have a certain waste, such as bone and other inedible material. A pound of cottage cheese daily would supply all the protein required by the ordinary adult engaged in a sedentary occupation.

The following table shows that cottage cheese is much cheaper than most meats in furnishing protein for the diet.

For supplying protein, one pound of cottage cheese equals:

1.27 pounds sirloin steak.

1.09 pounds round steak.

1.37 pounds chuck rib beef.

1.52 pounds fowl.

1.46 pounds fresh ham.

1.44 pounds smoked ham.

1.58 pounds loin pork chop.

1.31 pounds hind leg of lamb.

1.37 pounds breast of veal.

In addition to protein, energy for performing body work must be furnished by food. As a source of energy also, cottage cheese is cheaper than most meats at present prices. The following table shows the comparison when energy is considered.

On the basis of energy supplied, one pound of cottage cheese equals:

 $8\frac{1}{3}$ ounces sirloin steak.

 $11\frac{1}{4}$ ounces round steak.

11½ ounces chuck rib beef.

 $10\frac{3}{4}$ ounces fowl.

 $5\frac{1}{2}$ ounces fresh ham.

5 ounces smoked ham.

6 ounces loin pork chop.

 $7\frac{1}{3}$ ounces hind leg of lamb.

 $12\frac{3}{4}$ ounces breast of veal.

In the bringing up of a

BABY

CARE-CLEANLINESS-CAUTION

should at all times be exercised.

Give it proper

FOOD

CLOTHING

SLEEP -

AIRING

BATHING

HOUSING

The mother should nurse it.

Watch for eye discharge or inflammation.

Keep flies and dirt away.

Have it vaccinated.

See that the air, the clothes and the food are CLEAN.

THE INFANT AND SUMMER WEATHER.

The summer is here and with its attendant heat and weather conditions many will die before it is over. It is the duty of everyone having children to take especial care of each baby. If it becomes ill, abandon home cures and neighbors' remedies. Summon a physician at once. The baby's life is too valuable to lose for the sake of saving a few dollars or disregarding the advice of your friends. This is a doctor's business, this is what he is trained for. It is his responsibility. Your friend's advice is well meant and honestly given, but to diagnose a case and prescribe treatment is not his business. It is criminal to do so and just as bad for you to accept it.

The principal factors in the rearing of a child to good health are proper feeding, clothing, bathing, airing and housing. If it has these, a good and restful sleep will follow.

It is during the early stages of the infant's life that the danger lies. Of all the infants under one year of age that die, 40 per cent die before they are a month old, and 16 per cent before they are more than twenty-four hours old.

In this city no baby should be neglected by its parents for lack of care or treatment. There are sufficient organizations and associations in this city to aid any and all worthy cases. There is enough literature printed and distributed on infant care to provide abundant reading for all interested in baby welfare. There are institutions and hospitals to properly care for the homeless, and physicians and nurses to visit and treat infants at home whose parents are too poor to otherwise provide for them.

A baby that is progressing should show:

A steady gain in weight.

Bowel movements normal in number, color and consistency.

Absence of vomiting and regurgitation of food.

A good appetite and a clear skin.

Bright, wide-open eyes.

Muscles that are alert and springy.

' A contented expression.

Very little crying.

Quiet, unbroken sleep with eyes and mouth closed.

No evidence of pain or discomfort.

A constant growth in stature and intelligence.

Children vary in the rapidity of their growth. The mother should not become unduly alarmed at variations unless they are of a marked difference from above.

NOTIFICATION OF CONTAGIOUS DISEASE ON PREMISES OF MILK HANDLERS.

THE COMMONWEALTH OF MASSACHUSETTS, STATE DEPARTMENT OF HEALTH.

Section 8 of chapter 75 of the Revised Laws, as amended by chapter 670 of the year 1913, reads as follows:

Section 8. If smallpox or any other contagious or infectious disease declared by the state board of health to be dangerous to the public health exists or is likely to exist in any place within the commonwealth, the state board shall make an investigation thereof and of the means of preventing the spread of the disease, and shall consult thereon with the local authorities. It shall have co-ordinate powers as a board of health, in every city and town, with the board of health thereof, or with the mayor and aldermen of a city or the selection of a town in which there is no such board. It may require the officers in charge of any city or state institution, charitable institution, public or private hospital, dispensary or lying-in hospital, or any local boards of health or the physicians in any city or town to give notice of cases of any disease declared by the state board of health to be dangerous to the public health. Such notice shall be given either in the manner prescribed in sections forty-nine, fifty and fifty-two of chapter seventy-five of the Revised Laws as amended by chapter four hundred and eighty of the acts of the year nineteen hundred and seven, or in such other manner as the state board of health may deem advisable. If any such officer, board or physician refuses or neglects to give such notice, he or they shall forfeit not less than fifty nor more than two hundred dollars for each offense.

Acting under the provisions of this section, the State Department of Health, at a meeting held April 3, 1917, Voted, That beginning May 1, 1917, it shall be the duty of the officers in charge of any city or state institution, charitable institution, public or private hospital, dispensary or lying-in hospital, or any local board of health in any city or town to give immediate notice (preferably by telephone or telegram, "collect") to the State Department of Health, State House, Boston, or to the State Health Officer of the district, in every case coming to their notice in which typhoid fever, dysentery, diphtheria, scarlet fever or tonsillitis has occurred in the household of any person engaged in the production, transportation or distribution of milk for public sale; and in every case coming to their notice in which typhoid fever, dysentery, diphtheria, scarlet fever or tonsillitis has been due, or presumably has been due, to the consumption of milk infected with material derived from persons infected with said diseases.

The coöperation of the local boards of health in the past has resulted in a marked diminution of milk outbreaks and epidemics and further coöperation in carrying out the above method will result in a still greater reduction of epidemics due to milk.

> ALLAN J. McLaughlin, M. D., Commissioner of Health.

WORK TO BEGIN ON NEW HEALTH UNITS.

The appropriation for the new health units has been approved and work will soon commence on the alteration of these two buildings formerly used by the city, one in the East Boston section of the city and the other in South Boston. It is felt that with the money allowed for this purpose much good will result and these districts will have the benefit of a miniature health department such as the West End section has at the present time.

Much valuable real and practical work has been accomplished by the present unit, and it is safe to say that with the small amount of money expended to alter, equip and maintain this unit no greater return on an investment for public health work has ever been received in this country. The other units will be patterned after this one in so far as maintenance and operation are concerned, with a hope for even better results than those already obtained in the West End.

It is sincerely hoped that the department will have the same hearty coöperation of the public, physicians, nurses and the different departments and organizations in these sections of the city in the operation of this unit as it has had in the unit in Blossom street.

ANTERIOR POLIOMYELITIS (INFANTILE PARALYSIS).

Poliomyelitis, or infantile paralysis, was prevalent in the eastern United States last year and almost epidemic in New York City. In Boston there were 485 cases and 131 deaths. (These figures do not include outside cases brought to Boston for treatment.)

From the experience gained from the study of the disease in Boston and elsewhere, certain peculiarities have been noticed. The disease has a tendency to recur in the years following the outbreak. Though appearing in the same general territory, it does not come in exactly the same locality. It usually appears in places that are adjacent to the areas infected in the previous years.

However, this does not always happen. In 1909 Boston had many cases (299), but in the following years there were very few until 1916. Boston may fortunately escape an outbreak this year, but it is necessary to be prepared for any emergency.

Infantile paralysis occurs in definite seasons. In summer and autumn the outbreaks occur. With the approach of cold weather the disease disappears.

In Boston last year there were:

4 cases in July.
34 cases in August.
116 cases in September.
222 cases in October.
41 cases in November.
6 cases in December.

As the weather became colder, it can be seen that cases dropped off rapidly.

In January, 1917, there were only five cases in Boston, and since January 1, up to May 26, there have been nine Boston cases reported.

Infantile paralysis is a disease chiefly of childhood, attacking children preferably from one to five years. In Boston 85 per cent of the cases were under five years of age, 8 per cent between five and ten years, and 7 per cent for all other ages. (See table attached.)

	Cases.	Deaths.
One year and under	73	23
Between 1 and 2 years	151	34
Between 2 and 3 years	· 107	23
Between 3 and 4 years	58	14
Between 4 and 5 years	33	10
Between 5 and 10 years	35	12
All other ages	28	15
	485	131

Infantile paralysis attacks strong and well children, showing no preference for the feeble.

The age has an important bearing on the question of opening

of schools when an outbreak of infantile paralysis occurs. Most of the cases, 85–90 per cent, are under school age. Children over five or six years are not very susceptible to the disease. Therefore, children under six years of age should be excluded from school, and kindergartens may reasonably be kept closed, but all other schools should be kept open, nor should their opening be delayed, and all children over six years of age should be allowed to attend school, except when there is infantile paralysis in the house. Nothing is gained by keeping the schools closed. No increase of infantile paralysis was noticed in Boston after the schools opened and experience elsewhere has been the same.

Young children should be kept at home and should not be taken on excursions, picnics, shows or any promiscuous gatherings.

Neither in Boston nor New York was there any outbreak of infantile paralysis in institutions caring for many thousands of children. The few cases that were found had no tendency to spread among the other inmates.

No relation has been found between food and infantile paralysis. Many babies were attacked who were exclusively breast-fed while a great deal of the milk used by bottle-fed children was pasteurized before delivery.

To attempt to check the disease by any efforts directed against food seems to be an unprofitable procedure. It may be wise to direct that children should eat only cooked fruit. The possibility must be considered of the covering of apples and of other fruits. If such fruits eaten raw have been infected by the hands of fruit dealers in whose homes infantile paralysis may be present the disease is likely to be spread in this way.

No relation could be traced between density of population and the number of cases. The most densely populated wards did not show the largest percentage of cases. The disease was most prevalent, however, in the poorer districts of all sections. Italians as a class were apparently more frequently attacked than other nationalities, both in Boston and New York. It is not, however, a disease of the poor nor one of hygiene.

No connection between drinking water and infantile paralysis has been found. One attack confers immunity.

The prevalent opinion of health officers in the United States is to regard poliomyelitis as a contagious disease. This opinion is supported by many authorities. In this view poliomyelitis is regarded as being spread by the discharges, chiefly from the nose and throat, of those ill with the disease, from convalescents,

from abortive or unrecognized cases, or from carriers, *i. e.*, those who have not been sick but carry the virus in the nose or throat.

In Boston, in 1916, the same precautions were taken with poliomyelitis cases that were applied to diphtheria, scarlet fever, or any severe contagious disease, namely, complete isolation and supervision. To be certain that isolation would be enforced, 420 cases were sent or forcibly removed to isolation hospitals. Most of the remainder died before they could be sent to hospitals and of the very few that stayed at home the conditions were of the best — complete isolation and a trained nurse on every case. All contacts were isolated and under observation for three weeks by the Health Department. It is apparent that in treating the disease as contagious nothing more could be done. Until our knowledge of the etiology is more definite, the same course must be followed in the future.

The danger of contact infection does not seem to be very great. Rarely does a second case appear in the same family. In the 485 cases in Boston there were only thirteen instances of more than one in the same family. In six instances where two were ill in the same family both became sick at the same time, showing probably a coincident infection. In the other seven there was an interval between the first and second cases, showing the possibility of contact infection. When, however, the many hundreds of children exposed in infected households are considered and the fact that only seven contracted the disease, the danger of contact infection appears slight. Theoretically, contact infection should be very common. Practically it is very infrequent. Belief in respiratory contact is not generally held.

Notification was received through United States authorities and from other sources of numerous persons coming from infected districts. These, when found, were kept under medical observation for three weeks. No cases developed among them.

Contact infection, however, does not explain satisfactorily the method of transmission of poliomyelitis. Experimentally the disease has been produced in animals. Observation shows instances where direct infection is apparently undoubted. But poliomyelitis upsets all ordinary ideas of a contact disease. It does not act like diphtheria, scarlet fever or measles. Outbreaks always occur in summer and fall and die out with approach of cold weather. In Boston, in 1916, the height of the outbreak was reached in October with 222 cases, and fell off

rapidly to forty-one in November and to six in December. Since January 1, 1917, to May 15, 1917, there have been only nine cases.

The curve of infantile paralysis reaches its greatest height when insect life is most abundant and vigorous.

The possibility that infantile paralysis may be transmitted by vermin, biting fleas, mosquitoes, rat fleas or other vermin must be considered by health officials. In addition to taking all precautions against a contagious disease, efforts must be taken to destroy insect life.

Streets should be kept clean and free from dust. All garbage should be rapidly removed. No manure or filth should be allowed to accumulate. Stagnant water in brooks or receptacles should not be allowed to become the breeding place of mosquitoes. Flies should be destroyed and their breeding prevented.

Active measures should be taken to exterminate rats.

Domestic animals showing signs of paralysis should be isolated or killed.

Houses should be carefully screened.

Until our knowledge of the transmission is more complete every avenue of approach must be carefully guarded.

HEALTH CONSERVATION AT HOME IN TIME OF WAR.

Many physicians in this city are turning their attention to military and naval affairs, and this number will undoubtedly increase as the year progresses. On those who remain at home rests an added responsibility in the care of patients and in the health of the people in the community. With this decreased number of physicians, surgeons, nurses and health workers in the city to take care of a probable increase in illness, brought about by a shifting soldier and civilian population in consequence of war preparations, comes a situation which will tax our energies to the utmost.

To meet these conditions physicians who remain at home in civilian or official life are requested to give their hearty cooperation to the Health Department in matters of disease, sanitation and hygiene,— to see to it that all suspicious cases of communicable disease are promptly and carefully reported by telephone so that a final diagnosis may be quickly deter-

mined and hospitalization follow if necessary. Physicians should use their best efforts where cases of communicable disease are found to have the patient promptly and properly isolated. Where a case of typhoid fever is found the other members of the family should be inoculated at once with the antityphoid vaccine; if smallpox, report it at once to this department for diagnosis, hospitalization and vaccination for all contacts; if poliomyelitis, report it at once for care and treatment.

The card report sent in by physicians in cases of communicable disease should be mailed to the department when the case is first visited and if any insanitary conditions are found in or about the premises a report should be made to this department.

The laity as well as the professional man should help in our efforts to keep the city clean and free from communicable disease. Within a short time thousands of young men in perfect physical condition will depart from the city for training camps, leaving behind many thousands that are unfit for the rigors of war. This is a condition that must be met by health workers and all others interested in their own physical welfare and the heath condition of the city in general.

These times are extraordinary and mean an unusual amount of work. While many go to fight abroad there are others that must remain at home, and their fight is against invasion by disease. We should be on guard against inroads made by disease, to fight it if it comes within our borders, to conquer it if it requires all our time and attention.

Wars are costly. Disease is our common foe. It respects no sex, attacks all ages and exacts its toll from all classes.

Eternal vigilance is the price of good health. This is the time and season to get in readiness to resist such an invasion. Our best weapons are sanitation and hygiene. Let us learn a lesson during this period of war from other countries that have been attacked by disease and let us profit by their mistakes and show to the world an example of true efficiency and preparedness.

DO YOU KNOW THAT

Insanity costs every inhabitant in the United States \$1 per year?

Untreated pellagra ends in insanity?

REPORT OF THE HEALTH UNIT FOR THE MONTH OF MAY, 1917.

Health Department.

Visits made b	y m	edica	l in	specto	or:						
Contagious											52
Tuberculos	is										12
Ophthalmi	a										9
Miscellane	ous			•							15
Total											88
Cases visited	by r	nurse	s:								
Medical											194
Babies.	•	•			٠						324
Total							•				518
Defective sar	itar	v con	diti	ons fo	ound	l in t	tenen	nent	hous	ses.	23
Calls by distr											170
Inst	ruct	tive	Dist	rict	Nur	sing	, Ass	ocia	tion	l•	
Visits made h	oy nu	ırses	.•		•						618
	 F	Baby	Ну	gien	e As	ssoci	atio	n.			
Total number	r of l	babie	es ca	red fe	or						163
New babies a	dmi	tted									27
Conferences l	held										4
Total confere											278
Home visits	by n	urses				•		•			371
Associ	iated	l an	d H	ebrev	v F	eder	ated	Cha	ariti	es.	
Cases investi	gate	dand	dass	sisted				•			4
Co	nsu	mpt	ives	' Ho	spit	al D	epai	rtme	ent.		
Calls by nurs	es in	dist	rict								600

SUMMARY OF VITAL STATISTICS.

There were 1,279 deaths reported in the four weeks ending June 2, against 1,310 in the corresponding period last year, a death rate of 17.27 against 17.97.

Reported deaths of nonresidents numbered 191 against 183 last year.

Of deaths from reportable diseases the principal decreases were: $\,$

Saarlot forcer										. 6
Scarlet fever	•	٠	•	•	•	•				. 8
Whooping cough . Tuberculosis (all form	•	•	•	•	•	•	•			00
Tuberculosis (all form	18)	•	•		•			•		. 20
1.1 . 1.1										
and the principal	incre	ase	es we	ere:						
D: 1/1 :	-									1 F
Diphtheria				•			•		•	. 17
Diphtheria Cerebro-spinal menin	gitis	٠				•	•	٠		3
Other important d	iffer	enc	es w	ere:						
Decreases:										
Heart disease and neg	hriti	S								. 54
Cancer										6
Accidental and violen	t									6
Diarrhea and enteritie	s (un	der	2 yea	ars)						4
Increases:										
Pneumonia										21
Erysipelas										14
Other causes Diarrhea and enteriti										12
Diarrhea and enteriti	s (ov	er 2	year	s)						6
Bronchitis										. 5
There were 9 les	s de	ath	ns un	der	1 y	ear,	11 l	ess ·	under	5 years,
			ns un	der	1 y	ear,	11 l	ess ·	under	5 years,
There were 9 les			ns un	der	1 y	ear,	11 l	ess ·	under	5 years,
and 1 less over 60	yeaı	s.								
	yeaı	s.	FOU	R V	VEE					
and 1 less over 60	yeaı	s.	FOU		VEE					PERIOD
and 1 less over 60 MORTALITY FOR	year TH	s. E	FOU IN	R V 191	VEE 6.	KS	ANI) S/	AME	PERIOD . 1916.
and 1 less over 60 MORTALITY FOR Total deaths	year TH	rs.	FOU IN	R V 191	VEE 6.	KS	ANI) S2	AME 1917	PERIOD . 1916. 0 1,310
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate	year TH	S.	FOU IN	R V 191	VEE 6.	KS	ANI :) S.	AME 1917 1,279	PERIOD . 1916. 0 1,310 . 183
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate	year TH	S.	FOU IN	R V 191	VEE 6.	KS ·	ANI) S.	1917 1,279 191	PERIOD . 1916. 0 1,310 . 183 7 17.97
mortality for Total deaths Nonresidents Rate Corrected rate (nonresidents)	year TH	E ts c	FOU IN	R V 191	VEE 6.	KS	ANI) SA	1917 1,279 191 17 . 27	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46
mortality for Total deaths Nonresidents Rate Corrected rate (nonred Deaths under 1 year	year TH	ts o	FOU IN deduc	R V 191	VEE 6.	KS	ANI .) S.	1917 1,279 191 17.27	PERIOD . 1916. 0 1,310 . 183 7 17.97 0 15.46 . 200
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonred Deaths under 1 year Deaths under 2 years)	year TH	ts o	FOU IN deduc	R V 191	VEE 6.	KS	ANI .		1917 1,279 191 17.27 14.69	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonred Deaths under 1 year Deaths under 2 years Deaths under 5 years	yean TH : : siden	E ts c	FOU IN : : : : deduc	R V 191	VEE 6.		ANI		1917 1,279 191 17.27 14.69 191 246 291	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonred Deaths under 1 year Deaths under 2 years)	yean TH : : siden	E ts c	FOU IN : : : : deduc	R V 191	VEE 6.		ANI .		1917 1,279 191 17.27 14.69 191 246	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonred Deaths under 1 year Deaths under 2 years Deaths under 5 years	yean TH	rs.	FOU IN : : : : deduc	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384	PERIOD . 1916. 1,310 183 7 17.97 15.46 200 6 257 298 8 385
and 1 less over 60 MORTALITY FOR Total deaths	year TH	E tts c	FOU IN	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384	PERIOD . 1916. 0 1,310 . 183 7 17.97 0 15.46 . 200 6 257 . 298 8 385
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonred Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years Cerebro-spinal mening	year TH	es.	FOU IN	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreduction Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years Cerebro-spinal mening Diphtheria	year TH Siden Control	rs.	FOU IN	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the contro	year TH	ts of	FOU	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6 35	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18 —
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreductory) Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years Cerebro-spinal mening Diphtheria Malignant pustule Measles	year TH	ts of	FOU	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6 35 1	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18 — 20
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreductory) Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years Cerebro-spinal mening Diphtheria Malignant pustule Measles Scarlet fever	year TH	ts of	FOU	R V 191	DEA	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6 35	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18 — 20 10
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the contro	yean TH	ts of	FOU	R V 191	DEA	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6 35 1	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18 — 20 10 2
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreductory) Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years Cerebro-spinal mening Diphtheria Malignant pustule Measles Scarlet fever Tetanus Influenza	year TH	ts of	FOU	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6 35 1 21	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18 — 20 10 2 4
and 1 less over 60 MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonreduction of the control of the contro	year TH	ts of	FOU	R V 191	VEE 6.	KS	ANI		1917 1,279 191 17.27 14.69 191 246 291 384 1917. 6 35 1	PERIOD . 1916. 0 1,310 183 7 17.97 0 15.46 200 6 257 298 385 1916 3 18 — 20 10 2 4

										1917.	1916.
Tuberculosis	(othe	er for	ms)							20	20
Whooping co	ugh									4	12
Accidental an	d vio	olent								82	88
Heart disease	, end	locar	diti	s, pe	ricar	ditis	and	nepl	ritis	223	277
Bronchitis										15	10
Cancer .										93	99
Diarrhea and	ente	ritis	(un	der :	2 yea	rs)				19	23
Diarrhea and	ente	ritis	(2)	years	s and	ove	r)			12	6
Erysipelas										26	12
Meningitis an	nd en	ceph	alit	is						6	7
Old age .										4	1
Pneumonia										187	166
Premature bi	rth									38	34
Puerperal dis	eases									13	15
Other causes										367	355

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending June 2, 1917.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

	Tomer	Cases.	Tomax	Dynamyra	Nonresidents.					
	TOTAL	CASES.	TOTAL	L/EATHS.	CA	SES.	DEA	THS.		
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.		
Diphtheria	416	228	35	18	65	36	10	6		
Scarlet fever	176	219	4	10	30	55	2	4		
Measles	1,126	1,204	21	20	5	4	4	1		
Typhoid fever	17	8	2	1	1					
Whooping cough	82	187	4	12	1	2		1		
Tuberculosis (all forms)	279	338	117	143	23	31	13	17		
						!				
	CEN	NTRAL	DIVI	SION.						
Prosecutions authorize	ed .							8		
								4		
Stable permit revoked								1		
Stable applications ref								2		
Premises ordered vacar	ted							7		
Miscellaneous orders								5		
Applications Lying-in-	Hospit	tal appi	coved					2		
Forcible removals orde	ered							12		
Stable permits granted								5		
Undertakers appointed	l (ann	ual) .						210		
Dump permit revoked								1		
Dump permits granted	l .							4		
		(.	195)							

Licenses - Permits.

	ses — I							
Grease (licenses to remove) .								30
Grease (licenses to remove) . Vehicles inspected and approved Licenses to peddle fruit and vege								386
Licenses to peddle fruit and vege	etables							217
Manicure — Massage								220
Hen permits								50
Dumn nermits								3
Numbers assigned								235
Numbers assigned Stable license granted Undertaker appointed Dump permit revoked		,	·				·	1
Undertaker appointed							·	î
Dump permit revoked	•					•	•	1
Applications for peddlers' license	s annr	oved	•					352
				·			·	
MEDIC								
Commun								4 500
Number of visits by medical insp	pectors						٠	1,732
Antitoxin given Deaths investigated								30
Deaths investigated								11
Cases brought to Boston for trea	tment							122
Vaccinations								1,005
Vaccination certificates		. , .						98
Antityphoid vaccine administere	d .							39
Antityphoid vaccine administere Forcible removals recommended								12
Public								
Communicable disease visits .								4,423
Number of revisits (infants) .								871
Number of revisits (infants) . Number of new babies visited								4,070
								9,364
Total Visits by hires								
Total visits by nurses .						•	•	3,004
BACTERIOLOG	iical	LAE	ORAT	OR	Y.		٠	3,304
BACTERIOLOG Examinations fo	ilCAL r Diag	LAE	ORAT	O'R' Rele	Y.		٠	,
BACTERIOLOG Examinations for Diphtheria	ilCAL r Diag	LAE	ORAT	O'R' Rele	Y.			1,712
BACTERIOLOG Examinations for Diphtheria	iICAL r Diag	LAE nosis	ORAT and	O'R' Rele	Y.			1,712 449
BACTERIOLOG Examinations for Diphtheria	iICAL r Diag	LAE nosis	and	O'R' Rele	Y. ase.			1,712
BACTERIOLOG Examinations for Diphtheria	ilCAL r Diag	LAE nosis	and	TO'R' Rele	Y. ase.			1,712 449
BACTERIOLOG Examinations for Diphtheria	ilCAL r Diag	LAE nosis	and	ro'R Rele	Y. ase.			1,712 449 162
BACTERIOLOG Examinations for Diphtheria	ilCAL r Diag	LAE	and	ro'r Rele	Y. ase.			1,712 449 162 962
BACTERIOLOG Examinations for Diphtheria . Tuberculosis Typhoid . Syphilis Gonorrhea . Other examinations * Bacteriological milk examination	GICAL r Diag	LAF	and .	ro'r Rele	Y. ase.			1,712 449 162 962 476
BACTERIOLOG Examinations for Diphtheria . Tuberculosis Typhoid . Syphilis Gonorrhea . Other examinations * Bacteriological milk examination	GICAL r Diag	LAF	and	ro'r Rele	Y. ase.			1,712 449 162 962 476 143
BACTERIOLOG Examinations for Diphtheria . Tuberculosis Typhoid . Syphilis . Gonorrhea . Other examinations * Bacteriological milk examination Bacteriological water examination	GICAL r Diag	LAE	and i	ro'r Rele	Y. ase.			1,712 449 162 962 476 143 682 8
BACTERIOLOG Examinations for Diphtheria	GICAL r Diag	LAE	and	ro'r Rele	Y. ase.			1,712 449 162 962 476 143 682
BACTERIOLOG Examinations for Diphtheria	GICAL r Diag	LAF	SORAT and	roʻr Rele	Y. ase.			1,712 449 162 962 476 143 682 8
BACTERIOLOG Examinations for Diphtheria	ilCAL r Diag	LAF nosis	ON.	ro'R Rele	y. ase.			1,712 449 162 962 476 143 682 8 962
BACTERIOLOG Examinations for Diphtheria . Tuberculosis Typhoid . Syphilis . Gonorrhea . Other examinations * Bacteriological milk examination Bacteriological water examination T. B. Comp. Fix. Test FOOD Live Stock Inspec	ilCAL r Diag	LAF nosis	ON.	ro'R Rele	Y. ase.			1,712 449 162 962 476 143 682 8 962
BACTERIOLOG Examinations for Diphtheria	ilCAL r Diag	LAF nosis	and . ON. htton	ro'R Rele	y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727
BACTERIOLOG Examinations for Diphtheria	INSPI	LAF nosis	and	ro'R Rele	y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727
BACTERIOLOG Examinations for Diphtheria	IICAL r Diag	LAF nosis	and ON. thton	ro'R Rele	y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727 1 2,848
BACTERIOLOG Examinations for Diphtheria	IICAL r Diag	LAF nosis	and ON. hton	ro'R Rele	y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727
BACTERIOLOG Examinations for Diphtheria	IICAL r Diag	LAF nosis	and and ON. thton	ro'R Rele	y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727 1 2,848
BACTERIOLOG Examinations for Diphtheria	IICAL r Diag	LAE	and and ON. hton	ro'R Rele	Y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727 1 2,848 16
BACTERIOLOG Examinations for Diphtheria	IICAL r Diag	LAEL LAEL LAEL LAEL LAEL LAEL LAEL LAEL	and ON. hton	ro'r Rele	Y. ase			1,712 449 162 962 476 143 682 8 962 471 7,727 1 2,848 16 273
BACTERIOLOG Examinations for Diphtheria	IICAL r Diag	LAEL LAEL LAEL LAEL LAEL LAEL LAEL LAEL	and ON. hton	ro'r Rele	Y. ase.			1,712 449 162 962 476 143 682 8 962 471 7,727 1 2,848 16 273 1,446

^{*} Examination of rats, 73; Genito-Urinary Tuberculesis, 9; Ophthalmia, 48; Malaria, 7; Rabies, 1; Urines for Typhoid, 1; Feces for Typhoid, 1; Shiga, 1; Sputum for Pneumonia, 2.

			K IN					
,		ions a	as to	Statu	ite Re	equirem	ients.)	
Samples examined			***					
Chemical exam	inatio	ns of r	nilk .		•			. 1,504
Bacteriological	exami	ination	s of m	ilk	•			. 682
Chemical exam	inatio	ns of v	nnegar					. 54
Chemical exam								. 219
Bacteriological								. 4
Number of court	cases				•			. 84
Fines				۰				. \$1,495
	tion	of Pro	vision				lemned.	
Meat and Fish:				1		aneous:		
Poultry	•		ounds	1		elion .		8 bushels
Liver			ounds			d goods		477 cans
Lamb			ounds				pes . 71	
Frankfurts .		75 p	ounds	1	Cheese	э		0 pounds
Beef		75 p	ounds			beans .		8 pounds
Veal		6 p	ounds		Grape	fruit .		20
Haddock .		400 p	ounds		Currai	nts .		packages
Sausage		86 p	ounds		Eggs			2 dozen
Corned shoulde	er .	10 p	ounds		Orang	es		3 dozen
Fish		215 p	ounds					
Salt pork .		7½ p	ounds					
Turkey			ounds					
MORBIDITY	AND	MO	RTALI	TY	FOR	22 WE		
·							1917.	1916.
Total deaths .							1917. 6,040	1916. 5,994
Total deaths . Nonresident deat	hs						1917. 6,040 847	1916. 5,994 784
Total deaths . Nonresident death Deaths under 1 y	hs ear of	age					1917. 6,040 847 856	1916. 5,994 784 875
Total deaths . Nonresident death Deaths under 1 y Pneumonia .	hs ear of	age					1917. 6,040 847 856 1,033	1916. 5,994 784 875 985
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer .	hs ear of	age					1917. 6,040 847 856 1,033 403	1916. 5,994 784 875 985 389
Total deaths . Nonresident deat Deaths under 1 y Pneumonia . Cancer . Heart disease	hs rear of	age					1917. 6,040 847 856 1,033 403 533	1916. 5,994 784 875 985 389 567
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer .	hs rear of	age					1917. 6,040 847 856 1,033 403	1916. 5,994 784 875 985 389 567
Total deaths . Nonresident deat Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent	hs ear of	age					1917. 6,040 847 856 1,033 403 533	1916. 5,994 784 875 985 389 567
Total deaths . Nonresident deat Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent	hs ear of	age				LE DIS	1917. 6,040 847 856 1,033 403 533 65 SEASES.	1916. 5,994 784 875 985 389 567 76
Total deaths . Nonresident deat Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH	hs ear of	age				LE DIS	1917. 6,040 847 856 1,033 403 533 65 SEASES.	1916. 5,994 784 875 985 389 567 76
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria .	hs ear of eritis	age	2 years			LE DIS	1917. 6,040 847 856 1,033 403 533 65 SEASES.	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever .	hs ear of eritis	age	2 years			LE DIS	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever .	hs rear of eritis	age	2 years			LE DIS	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 4 32	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35 9
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever	hs ear of critis HS F	age	2 years		ICAB	LE DIS 1917 119 24 32	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 4 32 6 48	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35 9 5
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever Whooping cough	hs rear of	age	2 years		ICAB	1917 119 24 32 9	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 4 32 7 45	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35 9 5 4 2
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever	hs tear of the ceritis of the ceriti	age	2 years COM		IICAB	LE DIS 1917 119 24 32	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 4 32 7 45	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35 9 5 4 2
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever Whooping cough	hs rear of	age	COM		ICAB	DLE DIS 1917. 119 24 32 9 9	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 4 32 48 7 45 541	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35 9 5 4 2 46
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever Whooping cough Tuberculosis .	hs rear of	age	2 years		ICAB	1917 119 24 32 9 9 501	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 32 48 7 45 541 REPORTI	1916. 5,994 784 875 985 389 567 76 1917. Non- residents. 35 4 2 46 ED. 1917. Non-
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever Whooping cough Tuberculosis . CASES OF	hs tear of the certification o	age under ROM MMU	COM.	MUN BLE	ICAB	1917. 1918 1918 1918 24 32 9 9 501 ASES R	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 32 48 7 45 541 REPORTI	1916. 5,994 784 875 985 389 567 76 1917. Non- residents. 35 4 2 46 ED. 1917. Non- residents.
Total deaths . Nonresident death Deaths under 1 y Pneumonia . Cancer . Heart disease Diarrhea and ent DEATH Diphtheria . Scarlet fever . Measles . Typhoid fever Whooping cough Tuberculosis . CASES OF	hs tear of the certification o	age under ROM MMU	COM	MUN BLE	ICAB	1917. 119 24 32 9 501 ASES R	1917. 6,040 847 856 1,033 403 533 65 SEASES. 1916. 110 4 32 48 7 7 45 541 REPORTI	1916. 5,994 784 875 985 389 567 76 1917. Non-residents. 35 4 2 46 ED. 1917. Non-residents. 289
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64

152

1,200

54

915

1,212

120

Typhoid fever .
Whooping cough .
Tuberculosis .

SANITARY INSPECTION.

New reports					. 5,429
New tenement house reports				•	. 185
Legal notices recommended					. 1,019
Reinspections					. 8,676
Nuisances reported					. 10,605
Complaints investigated .					. 1,464
Number of court cases .					. 1

MONTHLY METEOROLOGICAL SUMMARY, MAY.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)
Mean, 29.81; highest, 30.30; date, 31; lowest, 29.44; date, 11.

TEMPERATURE.

Highest, 80; date, 20; lowest, 36; date, 6; greatest daily range, 28; date, 20; least daily range, 5; date, 29; normal for month, 56.6.°

PRECIPITATION.

Total this month, 4.45; snowfall, T; greatest precipitation in 24 hours, 1.40; date, 5, 6; snow on the ground at end of month, 0.0; normal for this month, 3.51.

WIND.

Prevailing direction, northwest; total movement, 8,303 miles; average hourly velocity, 11:2; maximum velocity (for five minutes), 31 miles per hour from east, on 5th.

WEATHER.

Number of days clear, 9; partly cloudy, 5; cloudy, 17; on which .01 inch or more of precipitation occurred, 14.

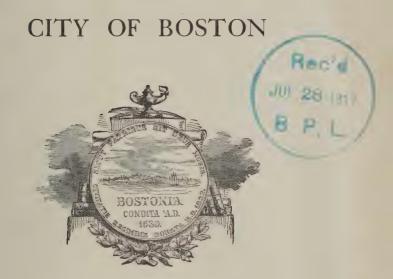
MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 7, 10, 19; lunar, 4; hail, 23, 25; sleet, 0; fog, 0; thunderstorms, 23, 28; frost: light, 0; heavy 0; killing, 0.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				Po	opu	lati	on	760,400	
Births							19,761	Birth rate	
Deaths							12,760	Death rate 16.78	8
	Of	the	ese	tota	al c	deat	hs 14.1	per cent were nonresidents.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Secretary			1.					1109 City Hall Annex.
Publications								1109 City Hall Annex.
								1109 City Hall Annex.
Medical Divi	sion							1107 City Hall Annex.
Communica								1107 City Hall Annex.
Child Hygie	ne							1108 City Hall Annex.
Health Unit								17 Blossom street.
Vaccination								17 Blossom street.
Detention E								Southampton street.
								17 Blossom street.
Bacteriologic	al L	abo	rato	ry		a	. ,	1101 City Hall Annex.

Commissioner of Health.

Examination of Cultures .

Wassermann Tests

TI BUDGE SERVICE SERVI			2101 010) 210012 2111110111
Food Inspection Division .			1110 City Hall Annex.
Inspection of Foodstuffs			1110 City Hall Annex.
Examination of Milk and Vinegar		t •	1104 City Hall Annex.
Inspection of Dairies			1102 City Hall Anney

1101 City Hall Annex.

1101 City Hall Annex.

Vital Statistics Records and Accounts . 1112 City Hall Annex. Permits for Burial 1112 City Hall Annex.

Superintendent of Peddlers 27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

FRANCIS X. MAHONEY, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, JUNE, 1917.

No. 6

"Oxygen is the fuel of the vital fires of life."

HEALTH AND VACATION.

There are many people who have not yet had their annual vacation and there are scores who have not yet decided about going and still others who are uncertain whether to go to the seashore, city or country. It is advisable for all who can to take a vacation this year, and the place chosen should be given the most careful and thoughtful consideration. Health and comfort should be sought this summer by everyone; it will be a great mistake to overwork and break down your system at a time when you should conserve all your energies for the more difficult trials that are bound to come when a nation is in a great war.

This year the country should be preferred to the city. During the stress and excitement of a war which is bound to grow more tense as the year progresses it would appear that a relaxation in a quiet and restful place, away from all strife and mental cares and worries, would be an excellent and beneficial investment

It is most natural for human beings to seek a change and a diversion from the hustle and rush of the city, oppressive climatic conditions and overcrowded homes, cars and offices. We should break the monotony of our daily lives, free ourselves from the mental worry that envelopes us and by this change of environment nurse ourselves back to good health. This is a period that is particularly depressing on the nervous, the anemic, the tired, the overworked and the worn out.

A machine cannot run forever without a rest, without oil and without repairs. The human system is far more delicate and important. It is easier, however, to repair a break in a machine, to replace an old part or take it apart and put it together again. This is not so with the human body. We should strive to keep it in constant repair, never let it break down, give it rest and proper food.

The greatest aids we have are rest, recreation and recuperation and the best place to get the full measures of these is in the country where with good, wholesome food, pure air, exercise and rest wonders will be worked with a torn and tired system. A vacation in the country gives an opportunity to readjust our mode of living to natural and proper lines. It gives us a chance to eat our meals regularly, to get at least eight hours' sleep after a day of exercise in the clear, fresh and bracing air. It is the best tonic ever prescribed and it is worth more than lakes of medicines and mountains of ointments and will ward off physical and mental degeneration.

Choose for your vacation a hotel, camp or boarding house in the country that is clean and sanitary, where an effort is made to prevent the breeding of flies and mosquitoes, and the pollution of wells and springs. The clean man is the healthy man and he should secure pure air, pure food, pure water and cleanliness of premises when he goes into the country. If the cost is a little greater to have these requisites it is far cheaper in the end to pay for them and he knows he can then insist that they be provided. Every citizen is entitled to protection against communicable diseases no matter into what city or state he goes and there is law enough to enforce preventable measures in every hamlet. If you are paying for good service and cleanliness it is your own duty to see to it that it is provided. You alone are to blame if it is not. It is your loss, both financial and physical.

We are fully aware that in many towns and villages health conditions may be lax through ignorance, neglect or carelessness, and it is this danger that you must fight. The easiest way to conquer it is to change as quickly as possible and you will be fully repaid for the inconvenience you have experienced. People that go to the country in summer often become just as careless as the proprietor of the hotel or boarding house where they are stopping. When we go on vacation we are leaving at home in the city a pure water supply and a properly inspected and regulated milk and food supply, and in the country districts we are unlikely to secure this protection against disease. To many it seems that milk right off the farm and sparkling water from a spring and the cool draught from the well are the elixirs of youth. They never give a thought to the possibility that in these unprotected elixirs often lurks the dreaded and

dangerous typhoid bacillus which so many vacationists bring back with them in their systems. Of course we realize that in such districts there cannot be the rigid regulations that obtain in a great city where food products come from all sources and are raised under all conditions. We can insist on cleanliness and if this is obtained in our country home and about the premises the danger of contracting disease is reduced to a minimum. Hotel proprietors all over the country are seeing the wisdom of conducting clean and sanitary establishments and are using every endeavor to satisfy their city patrons who, they know, are accustomed to clean and sanitary living conditions at home.

FOOD MANIPULATION.

Condemnation of food in the large markets of the city is generally due to the fact that the articles are decayed or decomposed. This is the result of faulty handling at some time between leaving the producers until it is exposed for sale to the public; such is due to delayed transportation and slow and improper methods of handling *en route* to markets.

A great deal of food is spoiled and rendered unwholesome owing to the cupidity of brokers in food products who store large quantities of food in cold storage warehouses and allow it to remain there until sometimes a profit of 150 per cent is realized. To cite a concrete case, eggs in March, 1916, were selling at 22 cents a dozen. Thousands of cases were put in cold storage at this price, both in Boston and at a private cold storage plant in Vermont. The overhead charges on these eggs amounted to 2 cents a dozen; this included shrinkage, lighting charges and refrigeration. These same refrigerator eggs sold for 48 cents a dozen in January, 1917. Some of these eggs when marketed were decomposed and unfit for food.

The loss from these decomposed eggs fell on the purchasing public and not on the wholesaler, who should have borne the loss.

The activity and good work of the United States Bureau of Chemistry, through its inspectors, has cut down materially the loss from decomposed or spoiled food and food products. Millions of dollars are saved every year to egg producers alone through the educational work done by the United States Department of Agriculture instructing the producers how to gather, classify and market eggs.

In regard to meat and meat food products, very little diseased

meat is found in the city markets, owing to the improved inspection at places of slaughter; but here again, owing to the avariciousness of the large meat handlers, great quantities of these food products become decomposed and unfit for food and again the wholesale dealer does not suffer the loss but passes it on to the unsuspecting public.

THE WAR AND THE SPREAD OF INFECTIOUS DISEASE.

The youthful poet, Tennyson, nearly a century ago, dreamed of a "parliament of man, the federation of the world." The vision seen by him and other prophets was that of a peaceful congress of the world's peoples, assembled in conclave for the settlement of disputes and exchange of new ideas in government, art and science. At such a gathering the disease peculiar to a certain corner of the earth would be discussed by the representatives of that section and ways and means devised by which it could be exterminated and thus prevent it from spreading to other portions of the globe. Instead of exchanging ideas for such meritorious objects as the defeat of disease, the peoples now gathered from the four corners of the earth in the present war are actually disseminating strange maladies brought with them. Truly, the "shot heard round the world" fades into silence beside the bullet from that Serbian student's revolver on June 28, 1914.

The mobilizing of colonists of the warring nations and the vast extent of the amphitheater of war gives rise to many anomalous circumstances. Thus Fiji Islanders appeared in battle array on the fields of France; Irish and Scotch fought in Turkey, and Arabs, Algerians and Sudanese stood shoulder to shoulder on the firing line in Flanders. Thus men have been suddenly transported to an environment and climate new to them and entirely opposite to their native one; they have been obliged to associate with men of other nationalities and habits, bearing with them the seeds of strange diseases. The conditions under which modern warfare is waged had their part in the production of disease. Soldiers dug themselves into ground saturated with manure. The artificial and severe conditions of trench life gave rise to trench foot, trench back, trench fever, nephritis, etc. Lice became a plague to the armies, and from the lice came typhus. The French army was not protected against typhoid, and at first thousands fell victim to the disease.

The Germans in Galicia were attacked by cholera, and everywhere tetanus, gangrene, and the gas bacillus became a trinity of terror.

However, looking at it broadly, this war has been a remarkably healthy one. Before this, each war has had its attendant diseases. Thus in the Franco-German War of 1870 there were 74,205 cases of typhoid in the German army, and of these 8,904 men died. When the German troops returned to their homes they brought with them an epidemic of smallpox from which there were more than 170,000 deaths. There has been nothing in the present war comparable with this. Indeed the average soldier, owing to the open-air life, the compulsory hygiene, and the discipline, is in better health than he was before the war began. Then the decline in the birth rate and the tremendous mortality in modern fighting have turned the nations to a closer study of prenatal care and infant welfare, with a consequent decrease of infant mortality. The vast number of cripples produced by the present-day engines of destruction has given rise to ingenious methods for making these unfortunates useful to society and to themselves.

It has been shown over and over again that those nations which were most efficient in public hygiene produced the healthiest troops for battle and kept them freest from disease. The United States may profit by this lesson. To be sure, civil and military hygiene have reached a high degree of efficiency here, but perfection has not yet been attained. The existence of the nation depends on its army and navy; they depend on the health of their units, the fighting men, and this again depends on the public health system of the nation. Let us then fight disease with every possible weapon, benefiting by the experience of the European nations, and sparing no pains to make our troops the healthiest in the world. (N. Y. Med. Jour.)

TO KEEP IN GOOD HEALTH IN HOT WEATHER.

Avoid excessive eating or drinking; do not keep late hours; plenty of sleep is very necessary for the health of both mind and body; let alcohol and tobacco alone; do not indulge in too much coffee or tea; eat the right kind of food, little meat in hot weather; live and sleep in fresh air; learn to relax; avoid needless worry and undue excitement; wear proper clothing; bathe frequently; avoid excess of sugar, salt and highly seasoned dishes; admit the sunshine to your homes; avoid the

"high pressure" life, but have periods of simple and wholesome recreation; drink plenty of pure water; take systematic and proper exercise; keep the teeth in clean and in good condition, and stand, sit and walk erect.

THE VALUE OF SKIM MILK.

Ways in Which This Nutritious Food Material May Be Used to Advantage in Cookery.

There are many places in which skim milk is not used as completely as it might be. On farms there is often more than can be profitably fed to calves or pigs. In creameries much of it is made into cottage cheese, but even then the whey, which is really rich in good materials, goes to waste.

Many people do not realize how nutritious skim milk is. They imagine that because it so generally has little or no commercial value it is hardly fit for human food. As a food it is not so valuable as whole milk, and cannot take the place of the latter in the diet of children. Nevertheless, skim milk can be used to great advantage in combination with other food materials, especially in cooking, and is altogether too valuable to be wasted.

A quart of whole milk weighs $34\frac{1}{8}$ ounces, or a little more than 2 pounds, nearly 30 ounces of which is water. The remaining solid matter contains very useful food materials. Slightly more than 1 ounce is protein, a very important muscle-builder, and one of the most expensive of the substances needed by the body. About $1\frac{1}{3}$ ounces consist of butter fat, and $1\frac{2}{3}$ ounces of milk sugar. These two materials are used by the body to provide it with energy, much the same as fuel is used to produce steam and power in the engine. The quart of milk also contains about one quarter of an ounce of mineral matter, small quantities of which are very necessary for the growth and general upkeep of the body.

As the fat is separated to form the cream some of the protein, milk sugar and mineral matter go with it, but by no means all; the protein remains; therefore a quart of separator-skimmed milk provides slightly more of this indispensable and costly material than does a quart of whole milk. It contains in all about $1\frac{1}{5}$ ounces of protein, $1\frac{1}{4}$ ounces of milk sugar, about one quarter of an ounce of mineral matter, and a little fat, the last named depending, of course, upon the completeness of the separation. This means that, quart for quart, it would furnish

the body with slightly more protein and milk sugar than whole milk does, and practically the same quantity of mineral matter, though far less fat. In other words, as a tissue-builder it is equal to whole milk, and as an energy yielder not nearly so good. Since, as a rule, the tissue-building materials are contained in the more expensive foods (meat, eggs, etc.), and the energy-yielding materials can be largely provided by cheaper foods (bread and other cereal foods, fats, potatoes, etc.), it seems doubly wasteful not to use skim milk.

Those who buy milk seldom have much skim milk to use unless they follow the custom of skimming their own cream. That there is economy in so doing is shown by the following: A quart of whole milk usually sells for the same price as a half pint of cream, which contains about one fifth ounce of protein, $1\frac{1}{2}$ ounces of fat, not quite one third ounce of milk sugar, and a very little mineral substance. If this is compared with a quart of whole milk, which very commonly can be purchased for the same sum, it will be seen that the purchaser in buying a halfpint of cream instead of a quart of milk sacrifices nearly an ounce of protein, $1\frac{1}{3}$ ounces of sugar and one fifth ounce of mineral matter. He gets, of course, a trifle more fat—about one fifth ounce, or a level teaspoonful — but this is small in comparison with what is sacrificed. Some people, therefore, buy whole milk instead of cream in order to have for family use the nourishment contained in the milk after it has been skimmed. Home-skimmed milk is, of course, richer in fat than that which has been skimmed by a separator, but it can be used in the same way.

YOU WHO BUY MILK FOR THE BABY!

What care have you used in its selection? Have you employed the same scrutiny that you would in the purchase of a hat or garment? If not, you have been unfair to the baby. Too often it is thought that any milk will meet the child's wants, whereas the best should be provided. Investigate supplies before ordering milk for the baby. In this effort the Health Department will gladly give its aid.

The Health Unit continues to add to its usefulness in the community. The Exemption Board for the district will use it for the examination of men to be selected for the military forces of the government.

STOP BREEDING FLIES.

Flies can be reduced in number more efficiently by cleanliness than by swatting. These pests multiply in and later feed on filth. Their increase can thus be checked by its prompt removal. Keep the back yards and alleys clean. Have a tight garbage holder and keep it constantly covered. Flies breed in human excrement and are dangerous to human beings, as they may carry intestinal organisms, such as typhoid and dysentery.

Flies propagate with much rapidity in horse manure. This may be prevented without appreciable loss to the fertilizing value of the manure as follows: Sift borax, in proportion of an ounce to a bushel of fresh horse manure and then sprinkle the mass with water. Borax can be also employed to good advantage upon the floors of stables, markets, and for the treatment of street sweepings. After using borax always sprinkle with water.

Don't allow flies to breed.

GLUTTONY A DETRIMENT TO HEALTH.

The sin of gluttony is common and therefore much condoned, but like every other violation of nature's laws has a penalty. Fat inefficiency, sluggish mentality, the reddened nose, the pimpled face, certain of the chronic skin eruptions, and much fatigue and nervousness are due to the abuse of the digestive apparatus. Rich, indigestible foods in large quantities, highly seasoned to stimulate the jaded palate, are forced into a body rebellious from repletion. Exercise is largely limited to walking to and from the table and bodily deterioration proceeds rapidly. Many an overfed dyspeptic, suddenly dragged by the stern hand of circumstances from a life of physical ease and plenty and forced to work out of doors, suddenly discovers that his semi-invalidism has gone, that a chronic skin derangement of many years' standing has disappeared and that a new vigor and zest of life has been given him.

Not everyone can spend his whole time in the open air but a certain amount of exercise and plain wholesome food in an amount not exceeding the body's needs can be had by almost everyone. Simple moderate diet and exercise make for health. These are not faddish food theories: they are just plain common sense.

MORTALITY FOR SIX MONTHS.

For the first half of the year there were 6,975 deaths reported to the Health Department against 6,842 for the same period last year, showing an increase of 133 for this year. Some of the increase may be accounted for by the increase of deaths of non-residents, 986 against 917 in 1916.

The deaths of infants under one year of age was 986 against 1,012 last year and the deaths of persons over sixty years of age for 1917 was 2,370 and for 1916 totaled 2,209.

Thus far this year the showing in communicable diseases has been an improvement over last year with the exception of diphtheria which shows an increase this year of 26, the figures being 148 and 122. This year there has been an increase in cases of diphtheria brought here from outside cities and towns for treatment.

Whooping cough deaths have decreased, only nine being reported in 1917 against 49 in 1916. Scarlet fever, measles, cerebrospinal meningitis and tuberculosis show appreciable decreases this year while typhoid fever remains about the same.

There have been three deaths attributed to anterior poliomyelitis this year against one last year; all of the deaths this year were in January.

Since January 1 there have been 11 cases from this disease, 9 of them having been reported during the first three months of the year and only 2 since March 30.

PULMONARY TUBERCULOSIS BY AGE PERIODS, JANUARY TO JUNE, 1917, INCLUSIVE.

Age Periods.	Under 5 Years.	5 to 10 Years.	10 to 15 Years.	15 to 20 Years.	20 to 25 Years.	25 to 30 Years.	30 to 35 Years.	35 to 40 Years.	40 to 45 Years.	45 to 50 Years.	50 to 55 Years.	55 to 60 Years.	60 to 65 Years.	65 to 70 Years.	70 to 75 Years.	75 to 80 Years.	80 to 85 Years.	85 to 90 Years.	90 to 95 Years.	Totals.	Grand Total.
Males	14	16	18	56	.94	100	95	81	69	70	55	35	23	7	3	2				747	1,204
Females.	17	11	23	43	78	79	47	50	39	23	18	15	2	3	5	2		1	1	457) 1,201

IMPORTANT SUGGESTIONS TO REMEMBER.

That your birth and that of every member of your family is registered in the city or town where born.

That vaccination is the great preventive against small=pox.

That inoculation against typhoid fever has proved its efficacy, especially in the military forces of all civilized nations.

That if you cover the food, screen the baby and clean the house you have done much to keep sickness away from your home.

That you choose a proper place for your summer vacation and not bring back in your system the bacillus of typhoid fever.

That in the hot summer months the mortality of infant deaths is high. At least give attention to the infants in your own home.

That you should encourage mothers to feed the infant at the breast. It has nine chances to one against the bottle=fed baby of surviving the first year.

That you should call your physician when sickness comes.

Delays are dangerous and often mean death.

That every life is valuable and worth saving.

Dollars will never take the place of a life.

PULMONARY TUBERCULOSIS CASES REPORTED BY WARDS, JANUARY TO JUNE, 1917, INCLUSIVE.

Wards.	January.	February.	March.	April.	May.	June.
1	6	6	4	3	6	5
2	9	6	3	10	5	7
3	4	2	6	3	4	9
4	8	4	4	6	8	2
5	30	32	42	38	30	27
6	29	7	23	15	24	16
7	3	14	7	5	9	5
8	11	4	9	16	8	8
9	15	8	10	10	11	8
10	5	8	. 7	4	1	2
11	6	4	6	11	2	15
12	9	10	10	12	18	14
13	20	12	17	17	10	8
14	8	6	6	8	9	6
15	8	4	8	5	11	4
16	4	3	2	9	3	
17	7	10	11	3	3	5
18	6	6	5	2	7	8
19	2	5	6	4	4	1
20	5	6	5	5	2	3
21.5	4	4	6	10	6	9
22	9	3	7	2	5	1
23	5	3	5	4	1	4
24	7	4	7	2	2	2
25	2	3	7	3	5	
26	2	3	2	4		3
Unknown						
Totals	224	177	225	212	194	172

PULMONARY TUBERCULOSIS, JANUARY TO JUNE, 1917, INCLUSIVE.

Cases by Sex, Condition, Color and Mother Nativity.

Mary Control of the C						
	January.	February.	March.	April.	May.	June.
Sex:						
Male	132	109	144	128	131	103
Female	92	68	81	84	- 63	69
Unknown						
Totals	224	177	225	212	194	172
Conjugal Condition:						
Single	104	82	97	93	85	72
Married	82	72	80	73	62	60
Widowed	12	4	. 8	9	18	21
Divorced	5	1	4	5	3	2
Unknown	21	18	36	32	26	17
Totals	224	177	225	212	194	172
Color:						
White	212	163	209	196	181	162
Chinese and black	12	14	16	16	13	10
Unknown						
Totals	224	177	225	212	194	172
Mother Nativity:						
Boston	16	14	10	13	8	13
United States	30	16	37	32	23	20
Ireland	61	53	50	56	45	53
England, Scotland and Wales	12	5	10	6	9	3
Germany	2	4	9	4	6	3
Canada	25	23	26	9	17	14
Sweden	. 3	5	4	5	2	2
Italy	14	13	11	16	12	13
France					2	
Russia	17	12	21	. 23	18	22
		31	41	27	19	8
Other countries	40	0.1				
	40	1	6	21	33	21

PULMONARY TUBERCULOSIS, JANUARY TO JUNE, 1917, INCLUSIVE.

Cases by Kind of House, Sanitation, Sleeping Arrangements, Sputum Reports and Hospital.

ments, sputum	Kep	orts a	ma I	iospit	al.	
	Јап.	Fel).	Mar.	April.	May.	June.
Kind of House:						
Single	23	21	22	25	21	21
Two apartment	29	28	28	15	25	23
Three apartment	68	52	55	62	60	60
Four apartment and over	13	7	6	35	34	17
Hotel		2 .				3
Lodging house	35	23	30	32	18	17
Institution	5	2	7	4	7	5
Basement	1					1
Not given	50	42	77	39.	29	25
Totals	224	177	225	212	194	172
Sanitation:						
Excellent	35	19	30	21	24	14
Good	79	64	79	79	66	70
Fair	58	52	59	60	63	53
Poor	23	15	10	13	12	10
Very poor	1					
Not given	28	27	47	39	29	25
Totals	224	177	225	212	194	172
Separate Room:						
Yes	140	108	126	119	120	113
No	45	36	40	49	37	34
Not given	39	33	59	44	37	25
Totals	224	177	225	212	194	172
Separate Bed:						
Yes	153	111	136	131	134	129
No	36	33	36	37	23	21
Not given	35	33	53	44	37	22
Totals	224	177	225	212	194	172
Sputum:						
Positive	58	45	61	40	50	25
Negative	24	19	13	22	14	27
Not given	142	113	151	150	130	120
Totals	224	177	225	212	194	172
Hospital:						
Yes	64	50	53	58	60	48
No	160	127	172	154	134	124
Totals	224	177	225	212	194	172

MILK AS A FOOD.

Economy in the diet does not always depend upon limiting the use of certain foods, but it is sometimes a question of actually increasing the use of foods which furnish nutritive material at relatively low cost. Milk belongs to the latter class, and the housewife would do well to study its food value and decide whether her family is using as much as it should. The average person in this country uses only a little more than a half-pint of milk daily, and this quantity can very profitably be increased when safe milk is available.

Many people think of milk only as a beverage, but if they understood that it is in reality a nourishing food, they would increase their daily allowance.

We eat foods for two main reasons: First, to renew body wastes and promote growth by forming new tissues and fluids, and, second, to supply energy for carrying on body functions. Milk contains the body-building materials (protein and mineral substances, such as lime and phosphorus) and also materials necessary for body energy.

In comparing foods it is necessary to consider both the protein and the energy furnished. Neither one alone can properly be used as a basis of comparison, nor is there any correct way to reckon the value of a food by considering the total amount of nutritive elements.

It is very difficult to compare foods on the basis of the mineral matter they contain, but all physiologists agree that milk is extremely valuable from this standpoint. Indeed, it is the food prepared by nature especially for the growth and development of the young. A quart of milk a day is a good allowance for a young, growing child.

In addition to being an economical food, milk is usually easily digested and requires no cooking or other preparation for the table. Specialists have also found that it is digested better when taken with other foods.

There are innumerable ways to use milk, and in all these ways it is both appetizing and nourishing.

MILK LEGISLATION.

An act defining pasteurized milk and regulating the sale thereof, known as chapter 259, was adopted by the last Legislature. Under its provisions pasteurized milk is defined as natural cows' milk not more than seventy-two hours old when pasteurized, subjected for a period of not less than thirty minutes to a temperature of not less than 140 degrees nor more than 145 degrees Fahrenheit, and immediately thereafter cooled therefrom to a temperature of 50 degrees Fahrenheit or lower. Representing or selling as pasteurized milk that which is not pasteurized as above is made illegal by this act.

Chapter 256, entitled An Act Relative to Classification and Grading of Milk, was also made a law this year. It was the intention of the originator of this measure to aid Massachusetts farmers who were producing a superior quality of milk. The original proposition was amended and altered by the Legislature, and the finished product, which follows, is not likely to benefit the farmers of this state, nor is milk sold under its provisions as "Grade A, Massachusetts milk" liable to have the confidence of the consumer.

Section 1. A grade of milk to be known as "Grade A, Massachusetts Milk," is hereby established.

The said grade shall consist exclusively of milk produced within this commonwealth from healthy cows under cleanly and sanitary conditions, and shall be so cooled and cared for that in its raw state the bacteria count shall not average more than one hundred thousand per cubic centimeters, upon examination of five samples taken consecutively, each from a different lot of milk, on five separate days.

Sect. 2. "Grade A, Massachusetts Milk" shall, when sold, kept or offered for sale or exchange, be designated and marked with a label, cap or tag, in plain, legible, bold-faced type, in the words following: "Grade A, Massachusetts Milk." The percentage of milk fat may also be stated upon said label, cap or tag, but in no case shall the amount of fat be less than the Massachusetts legal standard.

Sect. 3. The board of health of any city or town, upon application of any person, firm, association or corporation, desiring to sell or exchange milk therein as "Grade A, Massachusetts Milk," shall cause the milk produced or to be sold or exchanged by such applicant to be tested for classification as prescribed by section two of this act, and if upon such examination and test the milk so produced or to be sold or exchanged by the applicant is found to comply with the aforesaid requirements of classification of "Grade A, Massachusetts Milk," the board of health shall issue without charge to the applicant a written permit to keep for sale, exchange or delivery, or to sell, exchange or deliver in such city or town, milk graded, classified, designated and labelled, as hereinbefore provided, as "Grade A, Massachusetts Milk."

Any permit so issued may, at any time, be revoked upon written notice to the holder thereof, by the board of health issuing the same, if milk offered by the holder for sale or exchange as so graded or classified shall not comply with the aforesaid requirements.

Sect. 4. If any grade or classification of milk other than "Grade A, Massachusetts Milk" is established permits for the sale of such milk shall be granted and may be revoked in accordance with the provisions of this act in respect to "Grade A, Massachusetts Milk," but such permits

shall not be granted until the milk to be sold thereunder has been tested in such manner as the board of health, to whom application for the permit is made, shall determine. Milk sold or kept or offered for sale or exchange under such a permit shall be marked with a label, cap or tag in plain, legible, bold-faced type, expressing the name of the grade as it is determined by the board granting the permit.

Sect. 5. Whoever, himself or by his agent, or as the servant or agent of another, sells, exposes for sale or has in his custody or possession with intent to sell milk purporting to be of a grade established hereunder without having a permit so to do shall be subject to the penalty hereinafter provided.

Sect. 6. Whoever, himself or by his agent, or as the servant of agent of another, sells, exposes for sale, or has in his custody or possession with intent to sell, milk labelled as to its fat content which upon analyses of three samples taken consecutively, each from a different lot of milk, on three separate days, is found to contain less milk fat than that stated upon the label, cap or tag, and whoever sells, exposes for sale or exchange, or delivers, milk not wholly produced in Massachusetts in containers bearing upon a label, cap, tag, or otherwise, the words "Grade A, Massachusetts Milk," or other words indicating that such milk was produced in Massachusetts; and whoever in any manner represents that milk not wholly produced in Massachusetts was wholly produced in Massachusetts, or is of a grade designated as "Grade A, Massachusetts Milk," shall, for a first offence, be punished by a fine of not more than fifty dollars; for a second offence by a fine of not less than fifty nor more than one hundred dollars, and for a subsequent offence by a fine of not less than one hundred nor more than two hundred dollars. [Approved May 14, 1917.

SUMMARY OF RATES.
Birth and Death Rates per 1,000 of Population, 1901–1916.

	1901-05.	1906–10.	1910–11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	26.0
Deaths (excluding stillborns)	18.75	17.88	17.08	16.17	16.10	15.76	16.06	16.8
Smallpox	.095	.0003	.001					
Measles	.124	.127	.107	.154	.105	.083	. 053	.141
Scarlet fever	.153	.104	.107	.044	.105	.087	.106	.051
Diphtheria and croup	.387	.265	.180	.142	,212	.225	.291	.243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.091
Typhoid fever	.224	.160	.091	.079	.082	.088	.053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	.639	.605	.468
Diarrhea and enteritis (all ages)	1.112	1.033	1.139	.911	837	.731	.711	.551
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.462
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.10

REPORT OF THE HEALTH UNIT FOR THE MONTH OF JUNE, 1917.

Health Department.

Visits made by r	nedic:	al ın	specto	or:						
Contagious.										39
Tuberculosis										10
Ophthalmia										10
Miscellaneous										15
Total .										64
Cases visited by	nurse	es:								
Medical .										347
Babies										203
Total .										550
Defective sanita	ry coi	nditi	ons fo	ound	l in t	ener	nent	hous	ses,	27
Calls by district										107
,										
Instruc	ctive	Dist	trict	Nui	sing	g Ass	socia	tion	1.	
Visits made by r	nurses	5 .								001
									•	331
	Baby	у Ну	gien	e As	ssoci	atio	n.		•	991
Total number of			_							162
Total number of New babies adm	babi	es ca	ared f	or						
New babies adm	babi babi	es ca	ared for	or						162
New babies adm Conferences held	babi babi ditted	es ca	ared for	or						162 22
New babies adm	babi hitted d .	es ca	red for	or						162 22 5
New babies adm Conferences held Total conference	babi hitted d . e atter	es ca · · ndan s ·	red for	or						162 22 5 316
New babies adm Conferences held Total conference Home visits by	babinitted d . e attenurse nurse	es ca	ired for the control of the control	or	eder	atec		arit		162 22 5 316
New babies adm Conferences held Total conference Home visits by a	babi babi babi babi babi babi babi babi	es ca ndan s . nd H	ared for the second sec	or w F	eder	ated		arit		162 22 5 316 554

SUMMARY OF VITAL STATISTICS.

There were 935 deaths reported in the four weeks ending June 30, against 848 in the corresponding period last year, a death rate of 15.82 against 14.57.

Reported deaths of nonresidents numbered 139 against 133 last year.

Of deaths from rewere:	epoi	rtable	dise	eases	the	prin	cipal	decr	eases
were.									
Whooping cough									4
The principal increas	es v	vere:							
Tuberculosis (all forms)									34
Diphtheria									17 3
Scarlet fever	٠			٠		•	•	•	3
Other important differences:	eren	ices we	ere:						
Heart disease and nephr									20
Pneumonia									13
Erysipelas	•	•	•	•				•	5
Increases:									
Cancer									9
Cancer				• 2					8
Other causes Diarrhea and enteritis (ando			٠		•	•	٠	42 12
There were 7 less of			der	1 yea	ar, 2	more	unde	er 5 y	ears,
	rear	S.							
and 6 more over 60 y	Cai	~•							
MORTALITY FOR T			R V	VEEK	S A	ND S	SAME	PEI	RIOD
·		FOU	R V 191		S A	ND S			
MORTALITY FOR T	ГНЕ	FOU IN	191	6.			19	PEI 17. 35	RIOD 1916. 848
MORTALITY FOR T	THE	FOU IN	191	6.			19 9	17. 35 39	1916. 848 133
MORTALITY FOR Total deaths Nonresidents Rate	THE	FOU IN	191	6.			19 9	17. 35 39 82	1916. 848 133 14.57
MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonresid	THE ents	FOU IN	191 ted)	6.			19 9 1 15.	17. 35 39 82 44	1916. 848 133 14.57 12.26
MORTALITY FOR Total deaths Nonresidents Rate Corrected rate (nonresid Deaths under 1 year	· · · · · · · · · · · · · · · · · · ·	FOU IN	191 ted)	6.			19 9 1 15. 13.	17. 35 39 82 44 30	1916. 848 133 14.57 12.26 137
MORTALITY FOR TOTAL deaths	· · · · · · · · · · · · · · · · · · ·	FOU IN	191 ted)	6.			19 9 1 15. 13.	17. 35 39 82 44 30 66	1916. 848 133 14.57 12.26 137 164
MORTALITY FOR TOTAL TOTAL deaths	· ents	FOU IN	191 ted) .	6.			19 9 15. 13. 1	17. 35 39 82 44 30 66 96	1916. 848 133 14.57 12.26 137 164 190
MORTALITY FOR TOTAL deaths	· ents	FOU IN	191 ted) .	6.			19 9 15. 13. 1	17. 35 39 82 44 30 66	1916. 848 133 14.57 12.26 137 164
MORTALITY FOR TOTAL TOTAL deaths	rhe ents .	FOU IN	191ted) .	6.			19 9 1 15. 13. 1 1 1	17. 35 39 82 44 30 66 96	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	THE	FOU IN	191 ted) OF	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	CAU	FOU IN deduct	191 ted) OF	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	CAU	FOU IN 	191 ted) OF	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	CAUSS .	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	CAUSS .	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61 17. 8 29	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	CAUSS .	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61 17. 8 29 1	1916. 848 133 14.57 12.26 137 164 190 270
MORTALITY FOR Total deaths	CAU	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 2	17. 35 39 82 44 30 66 96 61 17. 8 29 1 19 6 2 1	1916. 848 133 14.57 12.26 137 164 190 270 1916. 9 12 1 199 3 1
MORTALITY FOR Total deaths	CAU	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 1 2	17. 35 39 82 44 30 66 96 61 17. 8 29 1 19 6 2 1	1916. 848 133 14.57 12.26 137 164 190 270 1916. 9 12 1 199 3 1 1
MORTALITY FOR Total deaths	CAU	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 1 2	17. 35 39 82 44 30 66 96 61 17. 8 29 1 19 6 2 1 99 20	1916. 848 133 14.57 12.26 137 164 190 270 1916. 9 12 1 19 3 1 1 71
MORTALITY FOR Total deaths	ents CAU s	FOU IN	191tted)	6.	TH.		19 9 1 15. 13. 1 1 2 19	17. 35 39 82 44 30 66 96 61 17. 8 29 1 19 6 2 1 99 20 1	1916. 848 133 14.57 12.26 137 164 190 270 1916. 9 12 1 19 3 1 1 71 14 2
MORTALITY FOR Total deaths	ents CAU s · · · · · · · · · · · · · · · · ·	FOU IN deduct JSES	191	6.	TH.		19 9 1 15. 13. 1 1 1 2 19	17. 35 39 82 44 30 66 96 61 17. 8 29 1 19 6 2 1 99 20 1	1916. 848 133 14.57 12.26 137 164 190 270 1916. 9 12 1 19 3 1 1 71 14 2 4
MORTALITY FOR Total deaths	CAU S CAU S CAU CONTROL CONTRO	FOU IN deduct	191	DEA	TTH.		19 9 1 15. 13. 1 1 1 2 19	17. 35 39 82 44 30 66 96 61 17. 8 29 1 19 6 2 1 99 20 1	1916. 848 133 14.57 12.26 137 164 190 270 1916. 9 12 1 19 3 1 1 71 14 2

										1917.	1916.
Bronchitis										8	8
Cancer .										78	67
Diarrhea and	ente	eritis	(uı	nder 2	yea	ars)				20.	8
Diarrhea and	ente	eritis	(2	years	and	d ove	r)			4	5
Erysipelas										7	12
Meningitis ar	ad er	ceph	ali	tis						4	7
Old age .										3	2
Pneumonia										71	84
Premature bi	rth									26	* 29
Puerperal dis-	ease	3								10	6
Varicella										1	-
Rheumatism										6	. 3
Other causes					44,			-		259	216

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

	Тотат	CASES.	Тотат	DEATES	Nonresidents.					
	TOTAL	CASES.	TOTAL	DERTHS.	CA	ses.	DEATHS.			
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.		
		i						i		
Diphtheria	331	213 95	29	12	49	33	4	5		
Scarlet fever	111		-6	3	13	17	2	1		
Measles	873	984	19	19	7	8	1			
Typhoid fever	12	. 11	1		2					
Whooping cough	43	122		. 4		1				
Tuberculosis (all forms)	328	238	119	85	34	15	18	14		

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending June 30, 1917.

CENTRAL DIVISION.

Prosecutions authorized								14
Stable hearing								1
Stable permit revoked								1
Stable applications refus	eď							2
Premises ordered vacate								3
Miscellaneous orders								8
Application Lying-in-Ho	spit	al ap	prov	red				1
Forcible removals ordered	ed							6
Stable permits granted								2
Dump permits granted								2
Milk license refused.								1
Permit to reoccupy .								1
Special draft								1
Culture station approved	d							1

Licenses — Permits.

Licenses — Permits.												
Grease (licenses to remove)		4										
Vehicles inspected and approved		280										
Licenses to peddle fruit and vegetables		134										
		219										
Hen permits		59										
Numbers assigned		327										
Numbers assigned Stable license granted Sundry licenses Dump permits		1										
Sundry licenses		11										
Dump permits		. 2										
Applications for peddlers' licenses approved		150										
MEDICAL DIVISION.												
Communicable Diseases.												
Number of visits by medical inspectors		1,293										
Antitoxin given		35										
Deaths investigated		18										
Cases brought to Boston for treatment		99										
		98										
Vaccination certificates		98										
Antityphoid vaccine administered		4										
		6										
		0										
Public Health Nursing.												
Communicable disease visits		3,461										
Number of revisits (infants)		1,618										
Number of revisits (infants)	•	337										
1 dilloct of new basics visited		001										
Total visits by nurses		5,418										
Total visits by nurses		5,418										
BACTERIOLOGICAL LABORATORY.		5,418										
BACTERIOLOGICAL LABORATORY.		,										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria		1,217										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis		1,217 337										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid.	•	1,217 337 92										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis		1,217 337 92 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis	•	1,217 337 92 585 332										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations *		1,217 337 92 585 332 116										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations *		1,217 337 92 585 332 116 554										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea Other examinations * Bacteriological milk examinations Bacteriological water examinations		1,217 337 92 585 332 116 554 11										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria Tuberculosis Typhoid Syphilis Gonorrhea Other examinations * Bacteriological milk examinations Bacteriological water examinations		1,217 337 92 585 332 116 554										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea Other examinations * Bacteriological milk examinations Bacteriological water examinations		1,217 337 92 585 332 116 554 11										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea Other examinations * Bacteriological milk examinations Bacteriological water examinations T. B. Comp. Fix. Test (special examinations)		1,217 337 92 585 332 116 554 11										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea Other examinations * Bacteriological milk examinations Bacteriological water examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION.		1,217 337 92 585 332 116 554 11										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea Other examinations * Bacteriological milk examinations Bacteriological water examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir.		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected Calves inspected Sheep inspected Swine inspected Animals condemned, whole		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected Calves inspected Sheep inspected Swine inspected Animals condemned, whole		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected Calves inspected Sheep inspected Swine inspected Animals condemned, whole		1,217 337 92 585 332 116 554 11 5 585										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations. Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected Calves inspected Sheep inspected Swine inspected Animals condemned, whole Parts condemned Stores inspected		1,217 337 92 585 332 116 554 11 5 585 330 1,910 1 2,892 8 252 1,279										
BACTERIOLOGICAL LABORATORY. Examinations for Diagnosis and Release. Diphtheria. Tuberculosis Typhoid Syphilis Gonorrhea. Other examinations * Bacteriological milk examinations Bacteriological water examinations Bacteriological ice cream examinations T. B. Comp. Fix. Test (special examinations) FOOD INSPECTION. Live Stock Inspected at Brighton Abattoir. Cattle inspected Calves inspected Sheep inspected Swine inspected Animals condemned, whole		1,217 337 92 585 332 116 554 11 5 585 330 1,910 1 2,892 8 252										

^{*} Examination of rats, 73; Genito-Urinary Tuberculosis, 5; Ophthalmia, 27; Malaria, 11.

MILK INS	SPECTION.
	Statute Requirements.)
Samples examined:	
Chemical examinations of milk .	1,119
Bacteriological examinations of mi Chemical examinations of vinegar	lk 481
Chemical examinations of vinegar	79
Chemical examinations of butter a	nd cheese
Bacteriological examinations of ic	e cream
Number of court cases	
Fines	
*	s — Articles Condemned.
Meat and Fish:	Miscellaneous:
Poultry 918 pounds	Tomato paste . 296 cans
Liver 35 pounds	Eggs (liquid) . 35 pounds
Pork 92 pounds	Eggs . 2 cases
Fowl $8\frac{1}{2}$ pounds	Walnuts . 1/4 bushel
Mutton 57 pounds	Tomatoes ½ bushel
Beef 45 pounds	Corn 24 bushels
Veal 82 pounds	Corn 116 crates
Sausage 40 pounds	
Corned shoulder . 5 pounds	
Fish 55 pounds	
Hamburg 11 pounds	
MORBIDITY AND MORTALI	TY FOR 26 WEEKS OF 1917.
Total deaths	
Nonresident deaths	
Dootha under 1 year of age	
Deaths under 1 year of age . Pneumonia	
Cancer	
Diarrhea and enteritis under 2 years	652 692
Diarrilea and enteritis (inder 2 years	85
DEATHS FROM COM	MUNICABLE DISEASES.
	Non- 1917. 1916. residents.
Diphtheria	148 122 40
0 1 1	30 35 11
26 1	51 67 7
F 1 1 1 0	10 7 4
9771 1 1	9 49 2
	600 612 55
	600 612 55 LE DISEASES REPORTED.
	600 612 55 LE DISEASES REPORTED. 'eeks.) 1917.
(26 W	LE DISEASES REPORTED. 'eeks.) 1917. 1916. residents.
(26 W	LE DISEASES REPORTED. reeks.) 1917. 1916. Non- 1917. 1916. 1,989 1,408 338
Diphtheria	LE DISEASES REPORTED. reeks.) 1917. 1916. 1916. 1918. 1919
Diphtheria	LE DISEASES REPORTED. reeks.) 1917. 1916. Non- 1917. 1916. 1,989 1,408 338
Diphtheria Scarlet fever Measles Typhoid fever	LE DISEASES REPORTED. reeks.) 1917. 1916. 1916. 1918. 1919
Diphtheria	LE DISEASES REPORTED. 'eeks.) 1917. 1916. residents. 1,989 1,408 338 1,945 1,368 187 4,376 4,211 32
Diphtheria Scarlet fever Measles Typhoid fever	LE DISEASES REPORTED. 'eeks.) 1917. 1916. residents. 1,989 1,408 338 1,945 1,368 187 1,4376 4,211 32 1,76 65 11

SANITARY INSPECTION.

New reports					3,210
New tenement house reports					173
Legal notices recommended					611
Reinspections					6,548
Nuisances reported					7,179
Complaints investigated .					1,081
Number of court cases .					9
Fines					\$50

MONTHLY METEOROLOGICAL SUMMARY, JUNE.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.) Mean, 30.01; highest, 30.35; date, 12; lowest, 29.76; date, 29.

TEMPERATURE.

Highest, 87; date, 20; lowest, 50; date, 11; greatest daily range, 28; date, 3; least daily range, 6; date, 11; normal for month, 65.8.°

PRECIPITATION.

Total this month, 4.05; snowfall, 0; greatest precipitation in 24 hours, 1.47; date, 17; snow on the ground at end of month, 0.0; normal for this month, 3.03.

WIND.

Prevailing direction, southwest; total movement, 6,140 miles; average hourly velocity, 8.5; maximum velocity (for five minutes), 30 miles per hour from west, on 17th.

WEATHER.

Number of days clear, 9; partly cloudy, 9; cloudy, 12; on which .01 inch or more of precipitation occurred, 13.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 9; lunar, 0; hail, 0; sleet, 0; fog, 2, 3, 8, 10, 11, 16; thunderstorms, 3, 8, 11, 24, 27; frost: light, 0; heavy 0; killing, 0.

JULY, 1917

Reg'd

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				Po	p	ulati	on	760,400	
Births							19,761	Birth rate	0.0
Deaths		٠					12,760	Death rate 16	. 78
	Of	thes	se	tota	al	deat	hs 14.1	per cent were nonresidents.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

			Particula					
Commissioner of	Heal	th.						
Secretary .								1109 City Hall Annex.
Publications							۰	1109 City Hall Annex.
Licenses .							۰	1109 City Hall Annex.
Medical Divisio	n							1107 City Hall Annex.
Communicable	Disea	ses				. 0		1107 City Hall Annex.
Child Hygiene								1108 City Hall Annex.
Health Unit								17 Blossom street.
Vaccination St	ation							17 Blossom street.
Detention Hos	pital							Southampton street.
Occupational C	Clinic							17 Blossom street.
Bacteriological	Labo	rato	ry					1101 City Hall Annex.
Examination of	f Cult	ures						1101 City Hall Annex.
Wassermann T	'ests	• ,					· .	1101 City Hall Annex.
Food Inspectio	n Div	isior	1					1110 City Hall Annex.
Inspection of I	Poodst	uffs						1110 City Hall Annex.
Examination o	f Milk	and	Vine	egar				1104 City Hall Annex.
Inspection of	Dairies	S						1102 City Hall Annex.
Brighton Abat	toir	•						Market street, Brighton
Sanitary Inspe	ction	Divi	ision					1111 City Hall Annex.
Abatement of	Nuisa	nces						1111 City Hall Annex.
Examination o	f Gasf	itters	3	•				1111 City Hall Annex.
Vital Statistics								1112 City Hall Annex.
Permits for Bu	rial			•	•		•	1112 City Hall Annex.

OFFICE HOURS.

Superintendent of Peddlers 27 North Grove street.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

Francis X. Mahoney, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, BULLETIN OF THE HEALTH DEPARTMENT, BOSTON.

VOL. 6.

BOSTON, JULY, 1917.

No. 7

Health is the hub of the wheel of progress.

SCHOOL OPENING — INSPECTION — RESPONSIBILITY.

A great economic and physical loss has been caused in years past due to lack of inspection and examination of school children. At the present time almost every city in the country has a division or department for this work, and while it is not perfect everywhere a start has been made with results that are bound to be productive of improvement. In cities where this work is carried on there is a gradual but constant betterment in the mental and physical development and progress of the growing school child. The prevention of communicable diseases is coupled with the detection of physical defects and ailments in any child that enters school, and while no treatment is applied, recommendations are sufficient in most cases to have defects treated and corrected by the family physician. The effort on the part of municipalities to bring to the attention of parents (who are often neglectful through ignorance) conditions in a child that should not exist is an endeavor that has come to stay, because facts have proved that this work is of a pressing necessity in a community. Physical health is essential to mental growth and good citizenship, and it is a duty on the part of the government, whether it be town, city, state or national, to see to it that every child within its confines is accorded every assistance to improve his education and thereby enhance his value to the community. To do this properly each child must and should have a proper start, for, after all, competition in every branch starts in childhood, and a child handicapped in early youth has much to make up in the race of life. Ill health, physical defects, deformities,

lowered vital efficiency are now noticed by the physician, the nurse and the teacher when the pupil enters school, and the system has been so arranged that as soon as such deficiencies are noticed the child is referred to the parents and family physician for attendance with the result that treatment is applied, defects corrected and physical conditions improved. Of course this does not obtain in all cases. The dangers and handicaps that a child suffers because of illness and defects in childhood are manifold and it is strange that the government had not recognized it years before the first start was made in this country. Absence on the part of the child from school is due invariably these days to illness or some ailment that in most cases is unwarranted. This absence leads to backwardness on the part of the child, keeps it from promotion. stifles ambition, leads to embarrassment, causes loss of interest in school work, and it entertains the daily hope of getting out of school as quickly as possible and in any manner. The child wants to get away from the environment in which it has been unsuccessful, he wants to go to work, and the bottom of the ladder is the lowest rung for a long time with the top never in sight for him. This is not imagination. These facts may be substantiated in every city neighborhood, and it may be further added that this lack of education on the part of the child leads to laziness, carelessness, indolence and finally an institution supported by the government. Physical defects often lead to criminal tendencies and abuses that are most difficult to curb, and all because of neglect on the part of the government and the parents to intensify their efforts in providing physical inspection and examination of children during their school age.

While the school teacher, the nurse and the physician may be of great service in the school, the parents of the child must shoulder some responsibility in coöperating with the authorities in their efforts to assist the child at the opening of the school term. Instruction and advice of the school physicians should be followed to the letter and if the child needs treatment it is the duty of the parents to provide it. Only in this way may proper inspection and examination be carried out to advantage to the pupil and to the community. As school is soon to open a word or two to parents at this time may not be amiss. See to it if possible that your child is in good physical condition and free from any communicable disease. If there is the least suspicion on your part, take the child to the physician and have him treated and defects corrected before

he enters school. This is not only a protection and an advantage to the child, but is also a safeguard to all other pupils in the room. All children physically fit are obliged to present sufficient evidence of vaccination before entering school and this should be done before the opening of the school term. Children who have been stopping at widely separated localities, a good many from the country, free from close contact with children who may have a communicable disease, gather in the school. The outdoor life has changed to an indoor one and all are brought together again in one common environment. The change is a radical one and it is a condition that is more conducive to the spread of disease than the outdoor country life that many children enjoy during the summer months.

There are some simple rules that parents might encourage their children to follow and also follow themselves, simple common sense, decency and cleanliness that will ward off many diseases that often prove fatal.

STANDARDS REDUCED WHILE LIVING COSTS INCREASE.

In 1916, despite the efforts made by this department, vinegar manufacturers and dealers succeeded in changing the standard of acetic acid in vinegar from 4.5 per cent to 4 per cent, making this requirement to suit themselves, with total disregard for the interests of the public. This change permitted manufacturers to substantially dilute vinegar with water to the present standard, approximately the conversion of eight gallons of vinegar of the old standard to nine gallons of the new requirement. No sooner was the lower standard legalized than this privilege was exercised. This legislation should have been called an act permitting the sale of water as vinegar, in place of the title. "An Act Relative to the Standard of Vinegar and to the Sale Thereof." Recently watered vinegar was found on sale where the greed of the manufacturers went beyond the legal restrictions, and as a result of tests made of these products court actions were instituted. Fortunately the courts took cognizance of all of the facts and imposed heavy penalties.

Just now consumers are paying more than ever for milk, and it is said that the end of price increase for this commodity has not been reached. How many realize, however, that at the behest of a few interested individuals the 1917 Legislature reduced the standard for milk solids from not less than 12.15

per cent to not less than 12 per cent? As an outcome, the legal milk of today carries less nourishment than under the old standard, and at the same time the cost has mounted so that many householders have reduced their daily purchases. High standards should be maintained for all foodstuffs, but if the quality is lowered there should be a corresponding decrease in price. Milk consumers would do well to bear in mind that an effort will undoubtedly be made during the coming year to further reduce the quality of milk by lowering the fat content from the present not less than 3.35 per cent to not less than 3 per cent. If such a bill is entered, it will require the endeavors of an aroused purchasing public to bring about its defeat.

SKIMMED MILK AND THE PUBLIC.

In connection with the frequent discussions and recommendations as to a more extensive employment of skimmed milk in households, a practical experiment whereby this commodity has been recently offered for sale in this city is of interest. For over two weeks, after announcement of the plan in the newspapers, bottled skimmed milk has been on sale in one of the densely populated sections of this city. The sales were made from a wagon which, in accordance with the plan, was at designated points in this section at stated times, and purchasers went to this wagon for their supplies. The price was five cents a quart, which has meant a loss on every quart sold, and before the end of the two weeks this loss was increased by the advancement of the wholesale price of skimmed milk. On the first day of the experiment difficulty was encountered in supplying the demand, and the sale of seven hundred quarts far exceeded the most optimistic predictions. From that period there was a steady decline in sales, until at the end of the two weeks the daily distribution was not over two hundred quarts. This means the abandonment of the team distribution. Undoubtedly the principal features of this outcome were that the people did not use the product for cooking purposes, as they were advised to do, but drank it and decided that it was not to their liking. and that there was decided opposition on the part of some milk dealers to the carrying out of this project by reason of its tendency to decrease their sales of whole milk. This hostility was known to agents of those concerns representing these firms in the territory in question, and doubtless was a factor in the prejudice of one of the races inhabiting this section, which

manifested itself by what amounted to a boycott of the product. The principal buyers of the skimmed milk were Italians. While this particular plan met with substantial failure, the result should not be construed to the disadvantage of skimmed milk as a food product. A fertile field was not selected for the proper development of the preliminary educational campaign.

RABIES IN DOGS.

During the past month in Boston dogs reported to be acting queerly have been killed and examined at the laboratory for possible traces of rabies, with the result that in three instances positive indications have been demonstrated by laboratory findings. These dogs were all owned in one section of the city and as a precaution a clinical examination was made by this department of all dogs in this district to the number of 136. No other cases were found. In no one instance had the dog bitten a human being.

It is generally supposed that rabies is more prevalent in summer than in winter on account of atmospheric conditions, the heat, but this is not necessarily so; rather it is because more dogs run unrestrained in the streets from April to October than during the cold winter months when they are housed. The popular opinion seems to be that a bite from a rabid dog in every instance causes hydrophobia in man. The figure has been placed at 40 per cent (not receiving Pasteur treatment). A man or dog suffering with rabies never recovers, the mortality being 100 per cent. The period of incubation is very indefinite, varying from a few weeks to several years. The average period in dogs is about forty days. It is fortunate that this period is so long as it gives an opportunity for prevention. The treatment discovered by Pasteur which is most efficacious requires about fifteen days to induce an active immunity to the disease. All wounds produced by bites of animals should be at once cauterized, especially if there is any suspicion of rabies.

The Health Unit continues to add to its usefulness in the community. The Exemption Board for the district uses it for the examination of men to be selected for the military forces of the government.

COMMUNICABLE DISEASES.

Preventive Methods.

What are our best preventive methods?

Immediate attention to any illness that may arise in a family and isolation of patients until a diagnosis has been determined upon, with special stress laid upon nasal discharges.

Report at once any suspicious case to this department for investigation. A strict medical supervision is as essential as martial law in time of war. We should thoroughly comprehend the necessity of personal habits of cleanliness, especially as regards the bath, change of clothing, washing the hands before eating, and so forth.

Children should be warned about putting the fingers into their mouths or nostrils.

Kissing of children should be avoided.

When sneezing or coughing a handkerchief should be held over the mouth. This is quite important.

The law against spitting should be rigidly enforced.

All food should be carefully protected and not exposed to contamination.

Thorough cleanliness of all floors, woodwork, bedding and utensils should be carried out.

Avoidance of dust should be insisted upon. Sweeping of floors should be done only after they have been sprinkled with moist sawdust or tea leaves.

Swat the fly—attack its breeding place. Best results are obtained by attacking these early, as every fly killed means a great gain. Remember that stable manure, privies and garbage of all kinds are its common place of abode.

Every householder should be made to realize that the presence of flies in the house may mean death to his children as well as a general public menace.

Screens should be in every window.

Garbage cans should be so placed and kept covered that they do not become a menace to the community. The premises about the house should be kept in a clean and tidy condition at all times.

Stray dogs and cats should be destroyed and all sick animals excluded from the home.

Let us enforce cleanliness as a public safety measure.

Human beings are the great agencies in the spread of human diseases.

TEN SUGGESTIONS FOR MILK CONSUMERS. Keep Milk Clean, Covered and Cold.

- 1. Buy only the best milk obtainable. It is cheapest in the long run.
- 2. Consult the Health Department before selecting your milk dealer.
- 3. Buy only bottled milk. Other milk is often dirty and deficient in cream.
- 4. Take milk into the house as soon as it is delivered, and place it in the refrigerator immediately. Bacteria increase rapidly in milk which stands in the sun or warms up, and such milk will sour quickly.
- 5. Keep milk in the original bottle in the refrigerator until the moment of serving. Milk which has been poured from the bottle should not be returned to it.
- 6. Keep the bottle covered with a paper cap or an inverted tumbler, to prevent the entrance of flies and dust, which may carry dangerous bacteria into the milk.
- 7. Keep the refrigerator clean and sweet by means of proper drainage and frequent washing with scalding water and sal soda, since milk quickly absorbs unpleasant odors and becomes less palatable.
- 8. Wash milk bottles as soon as emptied, by rinsing first with lukewarm water and then with hot water. If there is an infectious disease in your house, do not return any bottles except with the knowledge of the Health Department and under conditions which it may prescribe.
- 9. Return empty bottles promptly, and do not use them for anything except milk. Remember that they are the property of the dealer and represent cash.
- 10. Remember that clean milk properly cared for is one of the best foods obtainable. It is nourishing, digestible and economical.

Keep Milk Clean, Covered and Cold.

HEAT CAUSES FOOD DECOMPOSITION.

Heat causes meat, fish, eggs and milk to spoil.

Perishable foods should be kept in a cool, clean place, preferably in a good refrigerator, but in any event, in covered vessels in the coolest and cleanest place in your home or cellar.

Do not keep perishable foods in a hot kitchen or pantry or in the sun any longer than it is necessary.

Dry cold is more efficient than damp cold.

SYPHILIS IN THE AUSTRIAN ARMY.

In a recent issue of the Wiener Klinische Wochenschrift (XXIX., No. 51), Hecht, an Austrian army surgeon, states that in his corps records are now kept of every man with venereal disease, and a certain mark opposite the name of a man on the register indicates that in no circumstances is he to be granted home leave. This restriction of home leave had previously been enforced for typhoid carriers. Hecht adds that no one seems to class the venereal diseases with infectious diseases. but he is convinced that this neglect to apply the measures that have been found reliable with other infectious diseases will avenge itself sooner or later. He estimates that the number of syphilities in the Austrian army now must certainly be several hundreds of thousands, and complains that they are being treated in hospitals, while sound and healthy men are being shot down in their stead. This actually places a premium on sexual infection, for the healthy have no chance of a few months' respite in the hospitals from the fighting. The effect likewise is to spare the syphilities while the sound get killed off. He makes the very reasonable suggestion that the diagnosis should be the signal for sending the men to the front. This would have a deterrent effect; at present many prefer to take their chances with syphilis rather than with the enemy's shells. Hecht thinks it might be possible to form special companies of syphilitics as soon as the ulcers have healed over, so that the treatment could be conveniently continued and applied on the firing line, while infection of other troops would be prevented. Neisser long insisted that courses of salvarsan and mercury could be given perfectly well in the trenches. declares that it is impossible to reiterate too often the frightful danger for the populace from syphilities in the primary phase. Since the war began a total equivalent to sixty divisions have been temporarily withdrawn from the fighting for venereal diseases. In conclusion Hecht insists on the necessity for enlightening the public in regard to the danger of venereal disease in candidates for matrimony.—From Medical Officer. London.

AUTOMOBILE FATALITIES, BOSTON.

1912			33	1915			58
1913			42	1916			73
1914			47				

THE FALL FLY.

Notwithstanding the approach of the time when cooler weather may be expected, it is unsafe to cease efforts to check the multiplication of the house fly, or to be less vigilant in keeping these dangerous pests from your homes.

House flies are among the dirtiest things which enter your homes; they are sometimes called the "typhoid fly." They thrive in sewers, manure and privies, and deposit the filth therefrom on any food on which they alight. The germs of typhoid fever may be carried by flies in the filth on their bodies and in their excrement (flyspecks).

Cleanliness demands that flies be kept out of homes and away from food.

Health protection requires the banishment of flies. Keep food covered, or at least screened from these carriers of disease and filth.

Flies are mankind's enemy; use every means to kill flies.

ACCIDENTAL AND VIOLENT DEATHS, BOSTON, 1916.

Suicide by	poison	•							16
Suicide by	asphyxia								47
Suicide by	hanging or								
Suicide by	drowning			· j*					9
	firearms .								22
Suicide by	cutting or	pier	cing	inst	rume	nts			8
Suicide by	jumping fr	om	a hig	gh pl	ace				6
Homicide	by firearms	}					.•		8
	by cutting								
Homicide	by other m	eans							16

PASTEURIZATION AS A GENERAL VALUE.

Pasteurization is not alone of value in protecting the public from the dangers of milk infection when milk is used as such or in the form of cream, but also where milk or its products are to be consumed in some uncooked form. With cream employed in the manufacture of ice cream, whipped cream or the like, it is of as much importance to use pasteurized cream as though the latter was intended for employment in other ways. Community health is enhanced by efficient application of heat to milk and milk products.

GENERAL STATISTICS, 1916.

Wards.	Land Area in Acres.	Population, 1915 Census.	Persons to Acre of Land. (Using Census Popu- lation.)	Population. Estimated. (July 1, 1916.)	Death Rates, 1916. (Population Estimated.)	Birth Rates, 1916. (Population Estimated.)	Death Rates, 1916, of Children Under 1 Year per 1,000 Births.
Ward 1	1,080	23,776	22.0	24,253	15.71	22.02	103.00
2	480	41,904	87.3	42,745	15.67	45.15	82.38
3	422	21,016	49.8	21,438	16.23	20.01	132.87
4	403	18,585	46.1	18,958	16.77	19.31	177.60
5	750	77,573	103.4	79,130	13.51	29.32	104.74
6	316	37,250	117.9	37,998	15.79	19.76	94.54
7	500	35,084	70.2	35,788	13.69	11.09	110.83
8	782	38,317	49.0	39,086	11.46	13.25	84.94
9	1,006	33,996	33.8	34,678	16.70	23.70	130.17
10	328	25,741	78.5	26,258	14.51	25.71	88.88
11	863	26,234	30.4	26,761	.14.84	24.10	105.43
12	440	29,416	66.9	30,006	17.76	25.26	105.54
13	340	30,533	89.8	31,146	18.82	21.42	125.94
14	689	27,799	40.3	28,357	13.30	21.37	80.86
15	486	26,225	54.0	26,751	13.08	23.29	70.62
16	474	25,404	53.6	25,914	13.24	19.72	56.75
17	540	25,853	47.9	26,372	16.57	20.86	101.81
18	485	25,877	53.4	26,397	10.91	21.33	63.94
19	553	22,748	41.1	23,204	12.41	17.71	97.32
20	1,342	22,958	17.1	23,419	13.02	21.44	79.68
21	1,787	26,499	14.8	27,031	11.21	20.20	69.59
22	2,467	23,812	9.7	24,290	13.50	24.54	90.60
23	4,743	21,442	4.5	21,872	12.57	23.41	56.64
24	3,668	22,615	6.2	23,069	14.61	25.40	102.39
25	1,357	16,401	11.3	16,730	12.49	23.61	75.94
26	1,383	18,381	13.2	18,749	11.57	40.43	55.40
Boston	27,684	745,439	26.9	760,400	16.78	25.77	104.88

The quack doctor is among the most despicable of swindlers. He extorts the last dollar from the sick. He holds out false hopes. He inspires needless fears. He finds dangerous maladies where none exist. He deals in falsehood, relies on ignorance, capitalizes misfortune, teaches despair for his own profit and resorts to blackmail as a useful collection agency. He prostitutes the noble art of healing to lure in trusting victims.— Cleveland News.

REPORT OF THE HEALTH UNIT FOR THE MONTH OF JULY, 1917.

Health Department.

Visits made h	oy m	edic	al in	spect	or:						
Contagious	3 .										27
Tuberculos	sis										6
Ophthalmi									٠		3
Miscellane	ous				٠			. •		•	5
Total				٠	*		٠	٠	٠	•	41
Cases visited	by 1	nurse	es:								
Medical											171
Babies.			٠		• 1	:				٠	5 56
Total		٠				•		•		•	727
Defective sar	nitar	v coi	nditi	ons fo	ound	l in t	ener	nent	hous	ses.	13
Calls by distr											80
Inst	ruct	tive	Dist	rict	Nur	sing	, Ass	socia	tion	l.	
Visits made b	oy ni	urses	3 .			•		•		•	580
	I	3aby	и Ну	gien	e As	soci	atio	n.			
Total numbe	r of	babi	es ca	red fo	or						166
New babies a	dmi	tted			• 1						20
Conferences 1	held		٠						•		4
Total confere	nce	attei	ndan	ce							289
Home visits l	oy n	urses	3 .								429
Babies readm	nitte	d	٠	٠		•				•	2
Associ	atec	1 an	d H	ebrev	v Fe	eder	ated	Cha	ariti	es.	
Cases investi	gate	d an	d ass	sisted	•		٠		•	•	600
Co	nsu	mpt	ives	' Hos	spita	al D	epar	tme	nt.		
Calls by nurs	es in	dist	trict	•						٠	12

Good health is the foundation of personal usefulness either in peace or in war.

He who is too busy to care for his health may have to take time to cure disease.

SUMMARY OF VITAL STATISTICS.

There were 1,015 deaths reported in the five weeks ending August 4, against 974 in the corresponding period last year, a death rate of 13.74 against 13.36.

Reported deaths of nonresidents numbered 180, against 143 last year.

Of deaths from reportable diseases the principal decreases were:

W010.	
	5
The principal increases were:	
Diphtheria	26 7 3
Other important differences were: Decreases:	0
Pneumonia	1 25 7 7
Cancer	5 6 5
MORTALITY FOR THE FIVE WEEKS AND SAME PERIOR IN 1916.	
Total deaths 1917. 1916 Nonresidents 1,015 974 Nonresidents 180 143 Rate 13.74 13.36 Corrected rate (nonresidents deducted) 11.27 11.40 Deaths under 1 year 147 160 Deaths under 2 years 188 216 Deaths under 5 years 231 255 Deaths over 60 years 269 240	4 3 6 0 6 5 2
CAUSES OF DEATH.	ò.
Anterior poliomyelitis	

											1917.	1918.
Measles .										•	14	19
Scarlet fever											3	
Tetanus .					. 0						1	-
Tuberculosis	(puln	nona	ry)								118	93
Tuberculosis	(othe	r for	ms)								19	18
Typhoid feve	r										2	1
Whooping cor	ugh										2	4
Accidental an	d vio	lent									110	85
Heart disease	, end	ocar	ditis,	peri	icard	itis s	nd n	ephr	ritis		176	187
Pellagra .											_	1
Bronchitis		e.,									3	5
Cancer .											87	62
Diarrhea and	ente	ritis	(und	er 2	year	s)_					44	38
Diarrhea and	ente	ritis	(2 ye	ears a	and (over)					9	4
Erysipelas											4	4
Meningitis an	d en	ceph	alitis	}							4	5
Old age											3	1
Pneumonia											49	74
Premature bin	rth										35	42
Puerperal disc	eases										15	13
Varicella												1
Rheumatism											1	1
Other causes											291	298

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

(5 Weeks Ending August 4, 1917.)

	Tomar	Cama	Tomat	DEATHS.	Nonresidents.				
	TOTAL	CASES.	TOTAL	DEATHS.	CA	SES.	DEATHS.		
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	
Diphtheria	264	188	17	10	20	40	3	3	
Scarlet fever	77	64	3		12	16	1		
Measles	390	637	14	19	-1	3	2	1	
Typhoid fever	17	20	2	1	1	1	2		
Whooping cough	121	128	2	4	3				
Tuberculosis	362	270	118	108	36	20	11	8	

DO YOU KNOW THAT

Swimming is healthful exercise?

To keep healthy is your duty to your country?

No community can be really successful without safe waste disposal?

The Following is a Summary of the Work Done by the Different Divisions in the Department for the 5 Weeks Ending August 4, 1917.

CENTRAL DIVISION.

Prosecutions authorized									5
Stable hearings									2
Stable pemit revoked									1
Stable application refused .									1
Stable permit granted									1
Stable permit granted Premises ordered vacated .									5
Miscellaneous orders									10
Miscellaneous orders Applications Lying-in-Hospital a	nnrov	ed.						•	6
Forcible removals ordered .	oppro (O CL	•					Ċ	6
Dump permit granted									1
	•								1
Special draft							•		1
Undertaken enneinted	•								1
A				•					_
Appointments									4
Resignations accepted								٠	2
Licen	ses —	Pern	nits.						
Grease (licenses to remove) .									149
Grease (licenses to remove) . Vehicles inspected and approved									1,312
Licenses to peddle fruit and vege	etables								127
Manicure — Massage								•	27
Hen permits	•	•							20
Numbers assigned								•	140
Stable licenses granted	•	•	•					•	2
Stable licenses granted	•					•	•	٠	1
Sundry license Dump permit						•		٠	
								•	1
Applications for peddlers' license	es app	rovec	1	•	•				127
MEDIC	AL I	IVIS	SIOI	٧.					
Commu	nicabl	e Di	6699	200					
									=01
Number of visits by medical insp								٠	791
Antitoxin given	٠	•				•			41
Deaths investigated Cases brought to Boston for tree									17
									98
Vaccinations									11
Vaccination certificates									13
Antityphoid vaccine administere	d								4
Forcible removals recommended									3
Public	Healt	h Ni	ırsiı	ng.					
Communicable disease visits .									2,669
Number of revisits (infants) .									0 0 1 4
Number of new babies visited									1,596
Total visits by nurses .									11,106
Total visits by italises .	/ 100			•	•	•	•		1,100
	(168)							

BACTERIOLOGICAL LABORATORY.

Examinations for D	iagnosis and	Release.	
Diphtheria	, , ,		. 1,062
Diphtheria			. 332
Typhoid			4 4 0
Typhoid	*1 * *		. 696
Gonorrhea			. 362
T. B. Comp. Fix. Test (special exam	ninations) .		. 705
Other examinations *			
Other examinations * Bacteriological milk examinations .			. 570
Bacteriological water examination			
Bacteriological ice cream examinatio	on		. 21
			. 21
	SPECTION.		
Live Stock Inspected			
Cattle inspected			. 266
Calves inspected		,	. 882
Sheep inspected			. 1
Swine inspected			. 2,717
Swine inspected			. 1
Parts condemned			. 259
Stores inspected			. 1,301
Court cases			. 3
Fines			
	SPECTION.		
(Examinations as to S	Statute Requi	rements.)	
Samples examined:			
Chemical examinations of milk .			. 1,227
Chemical examinations of milk . Bacteriological examinations of mi	ilk		. 570
Chemical examinations of vinegar			. 153
Chemical examinations of butter a	nd cheese .		. 8
Chemical examinations of ice crea	ım		. 36
Number of court cases			. 60
Fines			. \$620
Inspection of Provisions			
			l.
Meat and Fish:	Miscellaneous		
Poultry 584 pounds	Eggs .		$\frac{1}{2}$ dozen
Liver 223 pounds		s	
Pork 1 pound	Potatoes .		36 bushels
Duck 3 pounds	Cantaloupe	e	2 dozen
Squab 29 pounds	Egg plant		45 crates
Beef 158 pounds			
Veal 1,315 pounds			
Tripe 1 keg			
Corned shoulder . 16 pounds Fish 418 pounds			
Fish 418 pounds			
Chicken 5 pounds Lamb 111 pounds			
Lamb 111 pounds			

^{*} Examination of rats, 79; Genito-Urinary Tuberculosis, 6; Ophthalmia, 26; Malaria, 12; Paratyphoid, 8; Leprosy, 2; Gonorrhea, 2; Feces for typhoid, 3; Urine for typhoid, 3; K. L. Vir., 1; Dogs for rabies, 5; Sputum for pneumonia, 1.

	SANI	TARY	Y IN	SPEC	TIO	N.		
New reports								. 4,355
New tenement house								. 160
Legal notices recomme								. 615
Reinspections								. 7,587
Nuisances reported .								. 7,574
Complaints investigat								. 1,221
Number of court cases								. 1
Fines								. \$15
								. 410
MO	RBID				RTA	LITY.		
		(31	Wee	ks.)			1917.	1916.
Total deaths							7,990	7,816
Nonresident deaths				٠	•		1,166	1,060
Deaths under 1 year o					٠		1,133	1,178
Pneumonia					٠			,
				•			1,153	1,143
				•	•		568	518
					٠		771	806
Diarrhea and enteritis	under	r 2 yea	ars	•	٠		129	122
DEATHS I	FROM	CO	MMI	INIC	ARLI	E DISI	FASES.	
DEATHS I	FROM				ABLI	E DISI	EASES.	
DEATHS I	FROM		MMU Wee		ABLI	E DISI	EASES.	1917.
DEATHS F	FROM				ABLI			Non-
	FROM				ABLI	1917. 165		
Diphtheria	FROM	(31			ABLI	1917.	1916. 132	Non- residents.
Diphtheria Scarlet fever		(31			ABLI	1917. 165	. 1916.	Non- residents.
Diphtheria Scarlet fever Measles		(31			ABLI	1917. 165 33	1916. 132 35 86	Non-residents. 43 12 9
Diphtheria Scarlet fever Measles Typhoid fever .		(31		eks.)	ABLI	1917. 165 33 65	1916. 132 35 86 8	Non-residents. 43
Diphtheria Scarlet fever Measles Typhoid fever . Whooping cough .		(31			ABLI	1917. 165 33 65 12	1916. 132 35 86 8 8	Non-residents. 43 12 9 6 2
Diphtheria Scarlet fever Measles Typhoid fever .		(31		eks.)	ABLI	1917. 165 33 65 12	1916. 132 35 86 8	Non-residents. 43 12 9 6
Diphtheria Scarlet fever Measles Typhoid fever . Whooping cough .		(31	Wee	eks.)	• .	1917. 165 33 65 12 11 718	1916. 132 35 86 8 53 705	Non-residents. 43 12 9 6 2 66
Diphtheria Scarlet fever Measles Typhoid fever . Whooping cough . Tuberculosis		(31	Wee	eks.)	• .	1917. 165 33 65 12 11 718	1916. 132 35 86 8 53 705	Non-residents. 43 12 9 6 2 66
Diphtheria Scarlet fever Measles Typhoid fever . Whooping cough . Tuberculosis		(31	Wee	eks.)	• .	1917. 165 33 65 12 11 718	1916. 132 35 86 8 53 705	Non-residents. 43 12 9 6 2 66
Diphtheria Scarlet fever Measles Typhoid fever . Whooping cough . Tuberculosis		(31 	Wee	eks.)	• .	1917. 165 33 65 12 11 718	1916. 132 35 86 8 53 705	Non-residents. 43 12 9 6 2 66 ED. 1917. Non-
Diphtheria Scarlet fever	MMU	(31 	Wee	eks.)	• .	1917. 165 33 65 12 11 718 SES RI	1916. 132 35 86 8 53 705 EPORTE	Non-residents. 43 12 9 6 2 66 ED. 1917. Non-residents.
Diphtheria Scarlet fever	MMU	(31 	Wee	eks.)	• .	1917. 165 33 65 12 11 718 SES RI 1917. 2,253	1916. 132 35 86 8 53 705 EPORTE	Non-residents. 43 12 9 6 2 66 2 66 ED. 1917. Non-residents. 358
Diphtheria	MMU	(31 	Wee	eks.)	• .	1917. 165 33 65 12 11 718 SES RI 1917. 2,253 1,022	1916. 132 35 86 8 53 705 EPORTE 1916. 1,596 1,432	Non-residents. 43 12 9 6 2 66 ED. 1917. Non-residents. 358 199
Diphtheria	MMU	(31 (31	Wee	eks.)	• .	1917. 165 33 65 12 11 718 SES RI 1917. 2,253 1,022 4,766	1916. 132 35 86 8 53 705 EPORTE 1916. 1,596 1,432 4,848	Non-residents. 43 12 9 6 2 66 ED. 1917. Non-residents. 358 199 33
Diphtheria	MMU	(31 (31	Wee	eks.)	• .	1917. 165 33 65 12 11 718 SES RI 1917. 2,253 1,022 4,766 93	1916. 132 35 86 8 53 705 EPORTE 1916. 1,596 1,432 4,848	Non-residents. 43 12 9 6 2 66 2 66 ED. 1917. Non-residents. 358 199 33 13

TRUISMS.

Being healthy is the first duty of a citizen.

Disease is the greatest foe to human progress.

It's the unused body that deteriorates quickest.

Fly destruction is its own reward.

A walk in the open is worth two in the house.

SUMMARY OF RATES.

Birth and Death Rates per 1,000 of Population, 1901-1916.

	1901-05.	1906–10.	1910-11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	26.0
Deaths (excluding stillborns)	18.75	17.88	17.08	16.17	16.10	15.76	16.06	16.8
Smallpox	.095	,0003	.001					
Measles	.124	.127	.107	.154	.105	.083	.053	.141
Searlet fever	.153	.104	107	.044	.105	.087	.106	. 051
Diphtheria and croup	.387	.265	.180	.142	.212	.225	.291	. 243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.091
Typhoid fever	. 224	.160	.091	.079	.082	.088	. 053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	. 639	.605	.468
Diarrhea and enteritis (all ages)	1.112	1.033	1.139	.911	.837	.731	.711	.551
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.462
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.10

Births estimated by Registry Department.

MONTHLY METEOROLOGICAL SUMMARY, JULY.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)
Mean, 29.95; highest, 30.26; date, 25; lowest, 29.62; date, 27.

TEMPERATURE.

Highest, 98; date, 30; lowest, 56; date, 10; greatest daily range, 25; date, 30; least daily range, 7; date, 11; normal for month, 71.3.°

PRECIPITATION.

Total this month, 1.10; snowfall, 0; greatest precipitation in 24 hours, 0.73; date, 27; snow on the ground at end of month, 0.0; normal for this month, 3.36.

WIND.

Prevailing direction, southwest; total movement, 6,603 miles; average hourly velocity, 8.9; maximum velocity (for five minutes), 27 miles per hour from west, on 27th.

WEATHER.

Number of days clear, 10; partly cloudy, 15; cloudy, 6; on which .01 inch or more of precipitation occurred, 7.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 8; lunar, 1.29; hail, 0; sleet, 0; fog, 8; thunderstorms, 3, 8, 11, 24, 27; frost: light, 0; heavy 0; killing, 0.

HEALTH DEPARTMENT MEDICAL DIVISION

FREE VACCINATION

The Health Department has established a Vaccination Station at 17 Blossom Street, near Cambridge Street, West End, where all persons residing in Boston may obtain vaccination free of charge every day between the hours of nine and twelve in the forenoon, and two to five in the afternoon, Sundays and Holidays excepted, and on Saturdays between nine and twelve in the forenoon.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON





FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				P	op	ulati	ion		760,	400				
Births							19,761	Birth rat	te .			0	٠	26.0
Deaths							12,760	Death ra	ite .		٠		۰	16.78
	Of	the	ese	tot	al	deat	hs 14.1	per cent	were	non	resi	den	ts.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Commissioner	01	Health.	
Connetant			1100 (%

Secretary .								1109 City Hall Annex.
Publications								1109 City Hall Annex.
Licenses .								1109 City Hall Annex.
Medical Division								1107 City Hall Annex.
Communicable I								1107 City Hall Annex.
Child Hygiene		• 1						1108 City Hall Annex.
Health Unit								17 Blossom street.
Vaccination Stat	ion							17 Blossom street.
Detention Hospi								Southampton street.
Occupational Cli	nic							17 Blossom street.
Bacteriological L								1101 City Hall Annex.
Examination of (Cultu	res	•			. ,		1101 City Hall Annex.
Wassermann Tes	ts	•						1101 City Hall Annex.
Food Inspection	Divi	sion						1110 City Hall Annex.
Inspection of Foo						•	•	1110 City Hall Annex.
Examination of I				0			•	1104 City Hall Annex.
Inspection of Da							•	1102 City Hall Annex.
Brighton Abatto	ir	• 1	•	•		•		Market street, Brighton.
Sanitary Inspect	ion	Divi	sion					1111 City Hall Annex.
Abatement of N								1111 City Hall Annex.
Examination of (1111 City Hall Annex.
Examination of	Jasin	tters		• -	•	•	•	Till City Hall Annex.
Vital Statistics F	Recor	rds .	and	Acc	oun	ts		1112 City Hall Annex.
Permits for Buri	al							1112 City Hall Annex.
Superintendent of	of Pe	lbbs	ers					27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday. Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

Francis X. Mahoney, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, AUGUST, 1917.

No. 8

Every rung in the ladder of success is strengthened by health.

BE PREPARED FOR COLDER WEATHER.

The climatic changes which we are about to experience will be so marked, especially at night time, that proper precautionary measures should be adopted to fit ourselves for the colder weather that is coming with the later months.

Cool weather keeps people indoors more and the outdoor life which they experienced and enjoyed during the summer is curtailed and they may become "shut-ins." If each one of us would endeavor to keep out doors just as much as we have been doing in warmer weather we would steel ourselves for the rigors of more severe weather and be healthy all winter. The more people stay shut up at home the greater is their danger of inviting many of the ills so common in winter. Our lungs need fresh air just as much as they did in the warmer months, exercise is just as fruitful, and the sun is just as beneficial.

Clothe yourselves a little more so that you can withstand the chill of the autumnal air; exercise by walking, breathe fresh air no matter how cold it may be and you will do much towards preparing yourself for the real cold weather. Vacations may be every bit as enjoyable in October as in July. It seems that during the past few years September, October and early November have been excellent months for vacationists, travelers and tourists.

True, there is a little more chill in the air but it is bracing and conducive to more exercise and a much better feeling, the blood is circulating, the pores of the skin are open, we are breathing fresh, clean air and are better able to exercise and sleep more comfortably than during the hot days of July.

In cool weather if we stay in the open we should not allow our bodies to become cold and chilled. The tonic effects of the cold air will be most appreciated if we keep moving. If we sleep out doors our bodies must be kept warm by plenty of covering. The splendid results of an abundance of air where we work and where we sleep is best demonstrated by the hospitals and sanitariums and by physicians who consider life out of doors one of the weapons in the successful treatment of various diseases.

After exercise we must not allow the body to cool too rapidly or suddenly for if one part of the body is cool and the rest warm the whole heat regulating apparatus of the body is upset and this may predispose to illness.

Air is of vital importance to the human body. It is a carrier of oxygen and is also a cooling agent. Bad, stagnant air does not cool the body. In breathing bad air the main danger seems to be the lowering of resistance and the increased danger of infection.

REDUCTION IN INFANT MORTALITY.

For the thirty-one weeks of this year ending September 1 there has been an appreciable decrease in the number of deaths in infants under one year as compared with the same period last year. This is a commendable and gratifying result obtained by much effort on the part of the various organizations, associations and parents working for this common end. The efforts that have been made are justifiable in view of the fact that there has been a decrease of 7 per cent in the number of deaths over last year. Education, milk stations, together with constant and regular visits by nurses to the homes before and after childbirth, have accomplished much in this work. The figures this year show a sufficient reduction to warrant a decreased infant rate over the figure of 1916. The month just passed showed a reduction of more than 30 per cent over last August and surely this is most encouraging in view of the fact that the past summer has been very hot and extremely trying to infants.

BACTERIAL POISONING AND CONDEMNATION OF FISH.

Apparently bacteria have easy access into fish on account of its chemical composition and its high water content. Harmful

bacteria which propagate in decomposed fish may cause serious ailments. The fish may be diseased when caught or the bacteria may grow throughout the meat as a result of contamination or imperfect preservation and not an unusual action of bacteria on fish is to make it highly poisonous. Fish caught and immediately killed retain their flavor longest and should be well cooked and eaten as soon as possible. Salt is a good preservative for fresh fish and smoking is a harmless method of preserving fish and it is also palatable prepared in this way. Cooked, salted or smoked fish does not spoil quickly.

Considering the fact that Boston is probably the largest fish mart in the world, where 100,000,000 pounds of fish are annually brought in by boats and approximately 50,000,000 by other vehicles, the situation is ordinarily satisfactory. Of course fish is handled quickly and disposed of in the same manner so that in this way there is but little opportunity for much of it to spoil in the large fish marts of the city. Fish that is not sold immediately is iced or placed in the great fish refrigerator on the fish pier.

At times due care and caution is not exercised by an individual fish dealer or packer and fish is allowed to spoil before sale or shipment. In the small store fish unsold for a few days and not properly iced becomes stale, and oftentimes this spoiled food will be sold by the fish peddler or storekeeper to an unsuspecting person. The department is always on the watch for violations of this sort and is ready and willing at all times to listen to complaints brought in by citizens and in every case has acted immediately to satisfy the purchaser.

Condemnation of Fish.

During the month of August there were condemned at a large fish establishment in East Boston the following lots of fish:

Eight thousand pounds salt herring, stomachs badly broken, fish in bad state of decomposition, packed in filthy, sour pickle.

Six hundred pounds salt mackerel, badly decomposed, packed in filthy, sour pickle.

Eighteen thousand one hundred pounds cod in an advanced stage of decomposition, packed in a filthy, discolored, sour pickle.

Two hundred pounds alewives, in an advanced stage of decomposition, packed in filthy, sour pickle.

Two thousand eight hundred pounds salt cod, drying in flakes, in an advanced stage of decomposition.

The cod and mackerel were slack salted fish which decomposed during the spell of hot weather last month. There is a scarcity of salt in some of the fish packing towns, and this cod and mackerel was not sufficiently salted. It was the intention of the packer to dry cure this fish for export to Central and South America, where it is claimed the public is not so particular as to the grade of fish furnished them. We also condemned at the same establishment 5,151 pounds of miscellaneous salt fish. All of this fish was sent to a fish glue works to be made into glue, the establishment not being allowed to sell it, even for bait.

In addition there was condemned at a wholesale establishment in the city proper 3,800 pounds of miscellaneous salt fish that became decomposed during the warm spell the past month. This fish was also sent to glue factory to be made into glue.

Condemnation of Cheese.

During the month of August 55,374 pounds of cheese was condemned on account of being decayed. This cheese was part of an importation of cheese from South America which arrived at New York, and its condition was not discovered until it got into the hands of the jobbers.

All this fish and cheese could have been saved for the consuming public if it had been properly handled, and this faulty handling is one of the great determining factors in the high cost of food and one which the public has to pay for.

LEGISLATION PERTAINING TO CLEAN MILK CONTAINERS.

In furtherance of the idea of proper care of milk utensils there was exhibited in the Health Department last March a small sterilizing outfit adapted to the necessities of the small milk dealer. This was an economical outfit, costing but a few dollars, and during the time it was in this office many Boston milkmen saw it in operation. One of Boston's concerns selling milk-handling outfits to dealers and producers was so impressed with the value of this apparatus that arrangements were made for its duplication for the use of those who cared to employ it.

In connection with this subject it is of interest to note here that, through the initiative of this department, this state in 1913 adopted legislation dealing especially with the matter of unclean milk containers. So far as known this was the first law enacted concerning this particular problem. Heretofore much consideration had been devoted to the quality of the product, disregarding the condition of the utensils in which it was processed and sold.

The following is a copy of the law in question:

Section 1. Vessels used as containers in the holding, handling or sale of milk to be sold, or intended for sale, shall be clean and free from foreign deposits upon the inside. Whoever, by himself or by his servant or agent, or as the servant or agent of another person, sells, exchanges or delivers, or has in his custody or possession with intent to sell, exchange or deliver, milk in vessels used as containers unclean upon the inside or having foreign deposits upon the inside, shall be punished by a fine of not more than fifty dollars.

Sect. 2. All appliances, implements, utensils, strainers or materials used in milking and in the treatment or mixing of milk to be sold or intended for sale shall be clean and free from foreign deposits. Whoever, by himself or by his servant or agent or as the servant or agent of another person, sells, exchanges or delivers, or has in his custody or possession with intent to sell, exchange or deliver, milk obtained, treated or mixed by the use of appliances, implements, utensils, strainers or materials unclean or having foreign deposits shall be punished by a fine of not more than fifty dollars.

IMPORTANCE OF CLEAN AND STERILE MILK UTENSILS.

One of the greatest single factors in causing bacterial contamination of milk will be eliminated when all milk utensils are properly washed and sterilized. Not only is this necessary on the farm but the milk dealer also should take more care to see that the cans returned are clean and sterile.

Lack of proper cleaning of milk utensils means that more or less organic matter is left in them. This organic matter undergoes bacterial decomposition, causing peculiar, musty, or even foul odors, and at the same time allows large numbers of bacteria to develop which contaminate the milk when it is put into the utensils. Experiments have demonstrated that milk pails, supposed to be properly washed, have harbored millions of bacteria, and that billions of bacteria have been taken from supposedly clean milk cans. In order to remedy these conditions it is necessary not only to wash utensils properly but to sterilize them by steam.

For proper cleaning and sterilizing utensils on the farm the producer must have a convenient and abundant supply of pure water, easy facilities for obtaining hot water, and some form of steam sterilizer.

The dairy within city limits should use city water and have it piped so that it will be most convenient. On the farm the ideal system is a central reservoir from which the water is piped to house, bath, milk room, and wash room. Wells or cisterns situated near the wash room may also solve the problem. A good, flowing spring of pure water is so important as to warrant the building of the milk house near it, though care must be taken to avoid any danger of surface contamination.

For washing utensils the dairyman should provide a tank large enough to hold a 10-gallon can. An abundance of hot water also is necessary, and may be obtained by running a pipe from the steam boiler to the wash tank and heating the water by means of live steam. If the dairyman does not possess a boiler some simple means of obtaining hot water should be devised. Direct heating of sufficient water over a furnace, wood or oil stove is too slow.

A form of heater in some parts of the country consists of a small brick furnace upon the top of which a barrel is set. A three-quarter inch pipe passes from the lower side of the barrel into the fire box, where it is arranged in a coil so as to expose a large surface to the flame. It then passes through the fire box wall into the upper half of the opposite side of the barrel, which is kept filled with water slightly above the upper outlet. A constant current of hot water flows through the pipe and very quickly heats all the water in the barrel.

In washing, utensils should first be rinsed with warm water and then scrubbed with brush, hot water and washing powder, after which they should be rinsed with hot water. Utensils should then be sterilized by means of some form of steam sterilizer.

As soon as sterilized, milk utensils, separator parts and straining cloths should be carefully protected from recontamination. Covers should be put on milk cans, and they should not be opened until they are to be filled.

HOUSE FLY AIDS DYSENTERY.

English Army Medical Authorities Discover How Cysts Are Carried About.

The medical correspondent of the London Times says:

"A discovery of importance is described in the Journal of the Royal Army medical service by Lieutenant-Colonel Wenyon and Capt. T. W. O'Connor of the Royal Army Medical Corps. The discovery is to the effect that cysts of amœbic dysentery, the great scourge of armies, are carried about by the house fly. One has only to remember the description of the fly plague at Gallipoli to understand how dysentery that broke out there was propagated. The authors conclude that the only efficient system of treating the fly in connection with sewage is complete destruction of the fly or arrangements preventing the flies from getting to the sewage at all. There is every reason to believe amœbic dysentery as well as many other intestinal disorders would thus be systematically reduced, if not entirely eradicated."

MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH MEETING.

The regular quarterly meeting of the association was held at the Pemberton Inn, Hull, Mass., Thursday, July 26, 1917. Boat left Rowe's Wharf, at 12.15 p. m.

Executive Committee meeting was held on the boat. Luncheon at 1 p. m. was followed by a business meeting.

PROGRAM.

"The Red Cross and Relief in Civilian Communities."

By Fred R. Johnson, Secretary of the Civilian Relief of the Boston Metro-

By Fred R. Johnson, Secretary of the Civilian Relief of the Boston Metropolitan Chapter, American Red Cross.

"A Large Concentration Camp in Its Relation to a Civilian Community."

By Charles E. Simpson, M. D., District Health Officer, State Department of Health.

REPORT OF BIRTHS.

Health Departments cannot make a record of births unless the information upon which such record is based is supplied by the attending physician. If the latter fails to furnish these facts he has not fulfilled his duty to the child, the parent or the law. Parents owe it to their children to see that physicians meet this obligation. When it is neglected the physician has not given the deserved attention to the case.

DO YOU KNOW THAT

The full dinner pail, the open window, the clean well, make for health?

ALCOHOL EFFECTS.

The effects of alcohol, useful and deleterious, may be summarized as follows:

	For.	Against.
Cells of body		Diminishes activity.
Nervous system: (a) Cells		Is a poison to all cells; possesses a special and injurious affinity for nerve cells.
(b) Brain	Small amounts cheer	Mental processes interfered with.
(c) General		Mental and nervous diseases frequently follow continued use.
Circulatory system: (a) Heart (b) Blood vessels	Stimulates (?) feebly and briefly.	Fatty or fibrous degenera- tion in steady drinkers, with tendency to apo- plexy.
(c) Heat mechanism		Produces fall in body temperature.
	Slightly increases flow of gastric juice.	Diminishes motility and digestive power.
		Small amounts impair di- gestion. Fatty degeneration and cirrhosis in steady drink-
Kidneys		ers. Bright's disease in steady drinkers.
Eyes		Degeneration of optic nerve.
		Excites passion; increases liability to venereal disease.
General effects: (a) Vitality (b) Resistance to disease. (c) Nutrition		Diminished. Lessened. Tendency to gout, fatty deposits and accelerated senile changes.
As a food	Small amounts oxidized in body to produce heat, to diminish tissue waste and to sustain strength in conditions of exhaustion.	senie changes. Not a true food; undesirable effects produced elsewhere balance good qualities in this regard.
As a medicine: (a) Digestive aid (b) Stimulant (c) Narcotic	Lessens sense of discom- fort, pain and fatigue.	Doubtful. Not a true stimulant.

[&]quot;Text Book of Military Hygiene and Sanitation" by Dr. F. R. Keefer, 1917.

TETANUS IN COURT=PLASTER.

The Director of the Hygienic Laboratory of the Public Health Service states that out of thirteen specimens of court-plaster examined two were found to be contaminated with tetanus bacilli. The specimens were secured from drug stores and were in original packages just as the product goes to the consumer. There is no ground for believing that the contamination was an intentional one. Whether contamination occurred during the process of manufacture through the use

of infected ingredients, or subsequently by careless handling, remains to be determined by further investigation.

It was also found that court-plaster is not "clean" in the surgical sense.

KEEP ICE CHEST CLEAN.

Cleanliness of ice chests is essential if the health of the family is to receive due consideration. Unless these storage receptacles are given constant oversight the food supply will not be kept in good condition. In fact, spoilage so produced in food materials may subsequently cause serious illness in human beings. Don't neglect the ice chest. Keep it clean and free from foreign odors.

"I think that saving a little child
And bringing him to his own,
Is a derned sight better business
Than loafing around the throne."
— John Hay — "Little Breeches."

BACTERIOLOGY AT THE FRONT.

Bacteriological investigation in hospitals of the front line has been a novel feature of this war. Nothing of the kind has been practised in any of our previous campaigns. It has been rendered possible by equipping motor vans as mobile laboratories. The first, which was sent out in October, 1914, had been a pleasure caravan. It was gutted and fitted with incubators and all the other apparatus of bacteriological work, and was followed by many others of the same type. They have been attached to a clearing station or a group of clearing stations, and the officer in charge is provided with a small motor car so that he can go to any place in his area where his services may be wanted.

These officers perform three functions:

- 1. They examine all kinds of morbid products from the hospital wards, and thus aid in the diagnosis of enteric fevers and other epidemic diseases on the medical side, and of the various forms of infection that attack surgical wounds.
- 2. They examine contacts in cases of infectious fever and search for carriers, both among the troops and in the civil population.
- 3. They investigate new forms of disease that appear among the troops in order to discover their causes and the means of prevention.

Instances of the first class of work are the examinations made of the blood and excreta in cases suspected of enteric fever, of malaria, or of dysentery, and of the cerebrospinal fluid, or the nasal mucus where cerebrospinal fever is in question.

The next function of these officers is to discover the source of an infection, and to stop it from spreading. In cases of enteric fever the work was very elaborate. In the first place. a systematic search was made for recent or chronic carriers among the troops. Thus, in one regiment a carrier was discovered in the regimental kitchen. In another, which had lately received enforcements, no less than ninety-five men had to be examined before the carrier was found. But the source of infection was not always in the troops. The part of Flanders that we held was a hotbed of enteric fever, and many cases were found in the civil population. The search for these was very difficult. In one village cases of enteric fever occurred in three successive formations that were billeted there.

The conditions of warfare made it far less possible to obtain contacts of cerebrospinal fever at the front, where men are constantly moving, than it is at home where a man may be stationary for weeks.

As instances of the examination of new or little known forms of disease I may mention trench fever, investigated by Captain McNee; spirochetal fever, by Capt. Adrian Stokes; gas gangrene and the histology of the prevalent nephritis, by Lieutenant Dunn. - SIR W. P. HERRINGHAM, C.B., M. D., British Medical Journal, June 23, 1917.

RECENT DECISIONS - LAWS AND ORDINANCES AFFECTING THE PUBLIC HEALTH.

Plague Prevention — Rat Proofing of Buildings.

Rat-proofing Ordinance.— An ordinance of the City of New Orleans required that "every building, outhouse, and other superstructure, stable, lot, open area, and other premise, sidewalk, street and alley now constructed or hereafter to be constructed in the city of New Orleans" should be rat proofed in the manner specified in the ordinance. The Supreme Court of Louisiana decided that the ordinance was a "valid and constitutional exercise of the police power of the state in the interest of the safety of the people." (New Orleans v. Beck, P. H. R. June 2, 1916, page 1437; New Orleans v. Mangiarisina, P. H. R. June 2, 1916, page 1440.)

Quarantine.

Removal of Patients.—A city ordinance made it the duty of the health officer to remove persons suffering from "any infectious or pestilential disease" to the City Hospital; but no hospital had been erected and no funds were provided for the removal or care of patients. Plaintiff asked a writ of mandamus to compel the health officer to remove a smallpox patient from his home, which had been quarantined. The court held that the health officer could not be compelled to remove the patient. (Gould v. Keller [S. Dak.], P. H. R. March 10, 1916, page 649.)

Reduction of Market Value of Adjacent Property.— The court of chancery of New Jersey decided that a court is not justified in granting an injunction prohibiting the location of a tuberculosis hospital in a suitable place merely because it may reduce the market value of property in the vicinity. (Northfield v. Atlantic County, P. H. R. March 24, 1916, page 791.)

Decisions Relating to Certain Communicable Diseases.

Diphtheria — Diagnosis.— A physician is not liable for damages for failure to correctly diagnose a case of diphtheria unless he has been negligent or has displayed a lack of skill in his profession. (Hrubes v. Faber [Wis.], P. H. R. September 8, 1916, page 2466.)

Plague — Prevention. — Rat-proofing ordinance held valid. (New Orleans v. Beck [La.], P. H. R. June 2, 1916, page 1437.)

Rabies — Prevention — Ordinance Authorizing Destruction of Dogs not Valid.— The Supreme Court of Oregon decided that an ordinance which provided for destroying impounded dogs without a judicial hearing, and in some cases without notice to the owners, was void as authorizing the taking of property without due process of law. (Rose v. Salem, P. H. R. February 4, 1916, page 272.)

Venereal Diseases — Advertisements Regarding Cure.— An Oregon law prohibited the publication of advertisements regarding medicines for the cure of venereal diseases or intended to imply that the advertiser could cure such diseases. The Supreme Court of Oregon decided that the law was constitutional. (State v. Hollinshead, P. H. R. August 25, 1916, page 2300.)

Typhoid Fever — Evidence Required to Prove Source of Infection.— A city dump, where human excrement and bodies of dead animals were deposited, was located about 1,940 feet

from plaintiff's dwelling. Members of the plaintiff's family contracted typhoid fever, but there was no evidence showing the source of the infection or that the bacillus typhosus existed at the dump. The Oklahoma Supreme Court held that the proof was insufficient to show that the dump was the cause of the disease. (City of Duncan v. Tidwell, P. H. R. February 18, 1916, page 396.)

Typhoid Fever.— The contracting of typhoid fever by employees from drinking impure water furnished by the employer was held to be an accident arising out of the conduct of the business. (Ætna Life Insurance Co. v. Portland Gas & Coke Co., P. H. R. August 18, 1916, page 2235.)

License — Discrimination.— An ordinance which imposes a license tax upon milk dealers is not void because it exempts from its provisions grocery stores selling milk where the grocery stores pay a license tax covering their entire business. (City of Newport v. French Bros. Bauer Co. [Ky.], P. H. R. September 29, 1916, page 2700.)

Sterilization May be Required.— A law of Illinois requiring that mattresses, comforters, or quilts remade or renovated for the use of the owners must be sterilized does not violate any constitutional provision and is a proper exercise of the police power. (People v. Weiner, P. H. R. April 21, 1916, page 1019.)

Validity and Effect of a Statute or Ordinance.

To be Valid as a Health Measure a Statute or Ordinance Must Provide Real Protection to the Public Health.— A provision in an Illinois law which prohibited absolutely the use of second-hand material in making mattresses, bed comforters, or quilts for sale was declared unconstitutional on the ground that such prohibition was not necessary to protect health, which, the evidence indicated, could be safeguarded by sterilization. (People v. Weiner, P. H. R. April 21, 1916, page 1019.)

Foodstuffs.

Shellfish from Contaminated Waters.—The Supreme Judicial Court of Massachusetts upheld a law which prohibited the taking of shellfish from waters which had been declared by the State Board of Health to be contaminated. (Commonwealth v. Feeney, P. H. R. September 1, 1916, page 2377.)

Implied Warranty.—New York.—When a dealer sells food-stuffs for immediate consumption there is an implied warranty that the goods are fit for food and are wholesome. (Rinaldi v. Mohican Co., P. H. R. July 7, 1916, page 1793.)

Implied Warranty.—Massachusetts.— Under the Massachusetts law the implied warranty of a dealer who sells food for immediate consumption does not extend to any person other than the immediate purchaser. (Gearing v. Berkson, P. H. R. December 22, 1916, page 3477.)

Manufacturer Liable Whether or Not He Knows that Food is Unwholesome.—The Supreme Court of Pennsylvania decided that a packer who prepares and sells articles of food which are unwholesome, and which cause disease in the consumer, is liable for injury caused by eating the food whether or not the packer knows that it is unwholesome. (Catani v. Swift & Co., P. H. R. June 23, 1916, page 1646.)

Reason for Holding Dealer Liable for Sale of Unwholesome Foodstuffs.— The rule that a dealer who sells foodstuffs for immediate consumption impliedly warrants them to be wholesome is said to be a harsh one. The reason for the rule is that "in the sale of provisions the vendor has so many more facilities for ascertaining the soundness or unsoundness of the article offered for sale than are possessed by the purchaser that it is much safer to hold the vendor liable than it would be to compel the purchaser to assume the risk." (Rinaldi v. Mohican Co., [N. Y.], P. H. R. July 7, 1916, page 1793.)

Federal Pure-food Law Does Not Relieve Manufacturer from Liability.— In Pennsylvania the fact that meat has been inspected and approved by United States inspectors in accordance with the Federal pure-food law does not relieve the manufacturer from liability for injury to the consumer if the meat is infected and unwholesome. (Catani v. Swift & Co., P. H. R. June 23, 1916, page 1646.)

Pork Infected with Trichinæ.— A Pennsylvania meat packer who sold pork containing trichinæ, the eating of which caused disease, was held liable to the consumer for injury, although the pork was purchased from an intermediate dealer. (Catani v. Swift & Co., P. H. R. June 23, 1916, page 1646.)

A New York woman purchased from a dealer pork which bore the United States Government stamp, but was infected with trichinæ. She and her family were made ill by eating the pork. The court held that the dealer was liable for damages. (Rinaldi v. Mohican Co., P. H. R. July 7, 1916, page 1793.)

Pork—Dealer Held Liable—Massachusetts.—Mrs. Gearing, acting as the agent of her husband, purchased from the defendants some pork chops. The chops were selected by one of the defendants, who sold them. They were eaten by Mrs. Gearing and her husband, and both were made ill. The

findings of fact showed that the defendants had not been guilty of negligence. The court decided that under the laws of Massachusetts Mr. Gearing could recover damages for the breach of an implied warranty that the chops were sound and wholesome, but that the warranty did not extend to any person other than the purchaser. Consequently, Mrs. Gearing could not recover. (Gearing v. Berkson, P. H. R. December 22, 1916, page 3477.)

Fish — Packer Liable for Injury.— The Supreme Court of North Carolina decided that a packer who negligently puts upon the market unwholesome fish is liable for damages for injury caused by eating such fish, even though the fish are purchased by the consumer from an intermediate dealer. (Ward v. Morehead City Sea Food Co., P. H. R. August 25, 1916, page 2302.)

Duty to Warn Customers When Danger is Discovered.— When a packer has notice of the fact that fish which have been sold by him are dangerous to health it is his duty to send warnings in the most expeditious manner in order to prevent, if possible, injury to consumers. (Ward v. Morehead City Sea Food Co. [N. C.], P. H. R. August 25, 1916, page 2302.)

Warning Must be Given Promptly.— The defendant was a packer of fish. After a lot of fish had been shipped and before they were sold by the retail dealer the defendant learned that the eating of other fish from this lot had produced illness. He sent a warning by mail to the dealer who purchased the fish, but did not telegraph. Several persons were made ill and one died as a result of eating the fish. The North Carolina Supreme Court held that the defendant was liable for damages. (Ward v. Morehead City Sea Food Co., P. H. R. August 25, 1916, page 2302.)

Manufacturer not Liable Unless Negligent — Tennessee.— A person who manufactures or puts on the market foodstuffs in packages which are sold by dealers is not liable for injury caused by foreign substances in the foodstuffs unless he has been guilty of some negligent act or omission in the performance of his duty to protect the public. (Crigger v. Coca-Cola Bottling Co., P. H. R. April 21, 1916, page 1022.)

Poisons in Foodstuffs—Federal Pure Food Law.—The shipment in interstate commerce of foodstuffs which contain added poisonous or other deleterious ingredients which may render the foodstuffs injurious to health is prohibited by the Federal pure food and drugs law. (Weeks v. United States, P. H. R. March 3, 1916, page 550.)

Arsenic in Candy — Federal Pure Food Law.— Defendant sold and shipped in interstate commerce shellae varnish for use in glazing cheap candies. The shellae contained minute quantities of arsenic. The court held that the question whether or not the small amount of arsenic used would "reasonably have a tendency to injure health" was properly submitted to the jury. (Weeks v. United States, P. H. R. March 3, 1916, page 550.)

REPORT OF THE HEALTH UNIT FOR THE MONTH OF AUGUST, 1917.

Health Department.

Visits made by medical inspector:

Contagious.										30
Tuberculosis				۰			•			25
Ophthalmia										5
Miscellaneous				*					•	35
Total .						•			•	100
Cases visited by	nurs	es:								
Medical .										176
Babies										423
Total .				• -			٠		۰	<u>599</u>
Defective sanita	rv co	nditi	ions i	found	l in 1	tener	nent	hous	ses.	13
Calls by district										78
		ъ.		N. T						
Instru										
Visits made by	nurse	S.		٠		•			٠	684
	Bab	у Ну	ygier	ne As	ssoci	iatio	n.			
Total number of	f babi	ies ca	ared	for						170
New babies adm										29
Conferences held										4
Total conference										4
Home visits by										311
Babies readmitt										
	ed	•		•	•		•	•	٠	443
Associate										443
	ed ar	nd F	lebre	w F	eder	ated				443
Associate Cases investigat	ed ar	nd F	lebre siste	w F	eder	ated				

Calls by nurses in	_			_				me			412

SUMMA	ARY	OF	₹ V	ΊΤΑ	۸L	ST	ATIS	STI	CS.		
There were 789 September 1, again			-								_
a death rate of 13. Reported death	.32 ag	gain	st 1	5.89).						
last year. Of deaths from											6
were:	-						•		-		
Measles Anterior poliomyelitis Tuberculosis (all form									•		3 17
Tuberculosis (all form	ns) -	•			•		•	•		•	4
The principal incre	eases	wei	e:								
Diphtheria Whooping cough .											16 7
Scarlet fever Cerebro-spinal menin											$\frac{2}{4}$
Other important d	liffere	nce	s we	ere:							
Decreases:											
Heart disease and nep Pneumonia								•			40
Premature				•							17
Cancer Accidental and violen	. •		•			•	•	•	•	•	13
Other causes				•		•				•	14 39
										•	
There were 53 less and 13 less over 6			s un	.der	1 y	ear,	52 le	ess	und	er 5 ;	years,
MORTALITY FOR	THI	E F		R V 191		KS	AND	S.	AME	PE	RIOD
m + 1 1 · · ·										17.	1916.
Total deaths							•			89 30	927 142

					47.4	2/1	100			
									1917.	1916.
Total deaths									789	927
Nonresidents									130	142
Rate .					٠.				13.32	15.89
Corrected rat	е (nonres	ide	nts d	educt	ted)			11.12	13.46
Deaths under	1	year						۰	168	221
Deaths under	2	years				٠			207	259
Deaths under	5	years	. ,						243	295
Deaths over 6	30	years	ì			٠			195	208

CAUSES OF DEATH.

	1917.	1916.
Anterior poliomyelitis	1	18
Cerebro-spinal meningitis	5	1
Diphtheria	18	2
Measles	8	11
Scarlet fever	2	******
Tetanus		2
Tuberculosis (pulmonary)	81	79
Tuberculosis (other forms)	13	21
Typhoid fever	3	3
Whooping cough	11	4
Whooping cough	72	86
Heart disease, endocarditis, pericarditis and nephritis .	127	167
Pellagra	1	2
Bronchitis	4	6
Cancer	52	65
Diarrhea and enteritis (under 2 years)	90	95
Diarrhea and enteritis (2 years and over)	13	10
Erysipelas	3	2
Meningitis and encephalitis	4	6
Old age	2	2
Pneumonia	35	58
Premature birth	21	39
Puerperal diseases	8	9
Rheumatism	3	
Other causes	212	239

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

(4 Weeks Ending SEPTEMBER 1, 1917.)

	TOTAL	CASES.	TOTAL	DEATHS.	Nonresidents.						
					CAI	ses.	DEATHS.				
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.			
Diphtheria	223	136	18	2	24	28	4				
Scarlet fever	43	40	2		13	21					
Measles	101	108	8	11	2	5	1	1			
Typhoid fever	32	16	3	3	4	1					
Whooping cough	118	86	11	4	4	1	1				
Ťuberculosis	235	209	81	79	18	14	9	10			

DO YOU KNOW THAT

Tuberculosis is contagious, preventable, curable?

He who builds up health lays up treasure in the Bank of Nature?

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Five Weeks Ending September 1, 1917.

CEN	TRA	AL T	HVI	SIO	N.					
Prosecutions authorized . Stable hearings										10
Stable hearings										3
Temporary stable permit Stable permit granted (provi Stable permits granted . Premises ordered vacated Miscellaneous orders .										1
Stable permit granted (provi	siona	1)								1
Stable permits granted .										3
Premises ordered vacated										4
Miscellaneous orders .										7
Application Lying-in-Hospita	l apr	rove	d							1
Forcible removals ordered										2
Special draft										1
Special draft Culture station approved										1
Appointments Leaves of absence granted										3
Leaves of absence granted										2
			D	. : 4 -						
		es —								9
Transfers		•	•	•	•	• .	•		٠	2
Hearings									٠	2
Crosse (licenses to remove)	•		•		٠	•	٠		•	1
Grease (licenses to remove) Licenses to peddle fruit and	·	ablaa	•	•	•	•	•	٠	٠	127
Manier Manager	reget	abies			•	•		٠	٠	56
Manicure — Massage .	٠	•	•		٠	•	•	٠	٠	12
Hen permits Numbers assigned	•	•		•	•	٠	•	٠	٠	39
Numbers assigned					٠	•	٠	٠	٠	242
						•	•	٠	٠	2
							٠	٠		2
	٠		•					٠	٠	1
Applications for peddlers' lice	enses	app	rove	1	•	•	٠	•	٠	680
MEI	DICA	L D	IVIS	SIO	N.					
Comm	nuni	cabl	e Di	seas	ses.					
Number of visits by medical:	inspe	ectors	}							907
Antitoxin given										871
Antitoxin given Deaths investigated										15
Cases brought to Boston for t	treat	ment								67
Vaccinations										127
Vaccination certificates .										4
Cases brought to Boston for to Vaccinations	ered									1
Forcible removals recommend	led									6
Pub				ırciı	nor					
Communicable disease visits										1,886
Number of revisits (infants)	•	•								4,768
Number of revisits (infants) Number of new babies visited	ľ	•	•					•	•	871
								•	•	
Total visits by nurses										7,525
BACTERIOL	.OG	CAL	LA	BO	RAT	OR	Y.			
Examinations	for	Diag	gnosi	is a	nd l	Rele	ase.			
Diphtheria										730
										269
		(192)							

Typhoid								150
Gonorrhea								273
Syphilis			٠.					565
T. B. Comp. Fix. Test (special exar	ninat	ions)						565
Other examinations *				٠				136
Bacteriological milk examinations.								514
Bacteriological water examinations								3
Bacteriological ice cream examination	ons							9
FOOD IN	ISPE	CTIO	N.					
Live Stock Inspected	l at	Brigh	iton	Aba	atto	ir.		
Cattle inspected		_						672
Calves inspected								834
Sheep inspected								1
Sheep inspected								0.010
Animals condemned, whole								· _
Animals condemned, whole Parts condemned					•			221
Stores inspected					•			~ 10
Court cases								7
77:								0400
Fines	•	•	٠	٠	٠	•	•	\$100
MILK IN	SPE	стіо	N.					
						\		
(Examinations as to	Stati	ite k	cequ	irem	ien	ts.)		
Samples examined:			,					
Chemical examinations of milk . Bacteriological examinations of m Chemical examinations of vinegar					٠			999
Bacteriological examinations of m	ilk		٠	٠	•	٠	•	514
Chemical examinations of vinegar			٠	٠	٠		٠	114
Chemical examinations of butter	and c	heese	•	. •	٠		٠	17
Chemical examinations of ice cre	am							14
Number of court cases								46
Fines		٠	•	٠	٠	•	٠	\$705
Inspection of Provision					lem	ned	•	
Meat and Fish:		iscella	neou	ıs:				
Poultry 241 pounds		Eggs						dozen
Liver 6 pounds		Chees						ounds
Pork 4 pounds		Potat					36 b	ushels
Frankforts 8 pounds	1	Canta	aloup	e .				dozen
Beef 74 pounds		Canta Toma Pop c	ito p	aste			43	0 cans
Veal 619 pounds							2,550) pkgs
Cut meats 3 pounds		Celer:	у.					bushel
Corned beef 16 pounds		Waln	uts.			. 8	500 p	ounds
Hamburg steak . 7 pounds								
Lamb 22 pounds								
Sausages 8 pounds	1							
Salt fish 35,184 pounds								
Alewives 200 pounds								
Salmon 3 pounds								
Mackerel 706 pounds								

^{*} Examination of rats, 52; Genito-Urinary Tuberculosis, 3; Ophthalmia, 45; Malaria, 19; Paratyphoid, 2; Rabies, 4; Ánthrax, 2.

SANITARY INSPECTION

SANI	TARY	INS	PEC	TIO	٧.		
New reports							. 3,028
New tenement house reports	3 .						. 147
Legal notices recommended							. 463
Reinspections							. 5,414
Nuisances reported			-				. 5,339
Complaints investigated .							. 921
Number of court cases .							. 3
Fines							. \$35
MORBID	ITY A	AND	MO	RTA	LITY.		
	(31	Weel	ks.)				
m 1 . 1 1						1917.	1916.
Total deaths	•		٠	٠		8,779	8,743
Nonresident deaths Deaths under 1 year of age			•	٠		1,296	1,202
Deaths under I year of age			٠	٠		1,301	1,399
Pneumonia	•	•	٠	•	• • •	1,188	1,201
Cancer	•		•	٠		620	583
			٠	* \	• •	898	975
Diarrhea and enteritis under	r 2 yea	rs	•	•		219	217
DEATHS FROM	CO.1	# B# F1	NIKO	ADIE	DICE	ACEC	
DEATHS FROM				ABLE	DISE	ASES.	
	(31	Weel	KS.)				1917.
					1017	1010	Non-
Diphtheria					1917. 183	134	residents.
Scarlet fever				• .	35	35	0
2.5					73	97	10
FD 1 11 0			٠	•	15	11	6
7771 * 1			٠	•	22	57	3
m 1 1 ·			•	•	799	784	75
Tuberculosis	•	•	•	•	1 99	101	10
CASES OF COMMU	INICA	BIE	DI	SEAS	ES DE	DODTE	:D
CASES OF COMM		Weel		SLAS	LO KL	FORIL	1917.
	(01	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-50)		1017	1012	Non-
Diphtheria					1917.		residents.
L .				•	2,476	1,732	$\frac{382}{212}$
Scarlet fever					1,065	1,472	212
Measles					4,867	4,956	35

DO YOU KNOW THAT

Bad temper is sometimes merely a symptom of bad health?

101

1,251

1,957

125

434

2,168

17

4

186

Rats are the most expensive animals which man maintains?

Hookworm enters through the skin?

Typhoid fever

Tuberculosis .

Whooping cough .

Exercise in the garden is better than exercise in the gymnasium?

SUMMARY OF RATES.

Birth and Death Rates per 1,000 of Population, 1901-1916.

	1901-05.	1906–10.	1910–11.	1912.	1913.	1914.	1915.	1916.
Births (excluding stillborns)	27.52	27.81	26.07	26.23	26.17	25.92	26.36	26.0
Deaths (excluding stillborns)	18.75	17.88	17.08	16.17	16.10	15.76	16.06	16.8
Smallpox	.095	.0003	.001					
Measles.,	.124	.127	.107	.154	.105	.083	.053	.141
Scarlet fever	.153	.104	.107	.044	.105	.087	.106	.05
Diphtheria and croup	.387	.265	.180	.142	.212	.225	.291	.243
Whooping cough	.124	.113	.156	.104	.132	.061	.148	.091
Typhoid fever	.224	.160	.091	.079	.082	.088	.053	.034
Diarrhea and enteritis (under two years).	.979	.910	1.010	.821	.729	.639	.605	.468
Diarrhea and enteritis (all ages)	1,112	1.033	1.139	.911	.837	.731	.711	. 551
Pulmonary tuberculosis	2.168	1.757	1.549	1.518	1.447	1.392	1.382	1.462
Deaths under one year per 1,000 births (excluding stillborns).	138.41	133.40	125.15	115.74	109.69	103.12	103.68	104.10

Births estimated by Registry Department.

MONTHLY METEOROLOGICAL SUMMARY, AUGUST.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 30.02; highest, 30.38; date, 31; lowest, 29.64; date, 24.

TEMPERATURE.

Highest, 98; date, 1; lowest, 58; date, 26; greatest daily range, 26; date, 27; least daily range, 7; date, 22; normal for month, 68.9°.

PRECIPITATION.

Total this month, 7.06; snowfall, 0; greatest precipitation in 24 hours, 3.60; date, 9-10; snow on the ground at end of month, 0.0; normal for this month, 4.03.

WIND.

Prevailing direction, southwest; total movement, 6,014 miles; average hourly velocity, 8.1; maximum velocity (for five minutes), 27 miles per hour from west, on 2d.

WEATHER.

Number of days clear, 15; partly cloudy, 11; cloudy, 5; on which .01 inch or more of precipitation occurred, 10.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 25; halos: solar, 15; lunar, 1.0; hail, 0; sleet, 0; fog, 8, 12, 23, 34; thunderstorms, 2, 9, 10, 17, 21, 25, 29, 30; frost: light, 0; heavy 0; killing, 0.

HEALTH DEPARTMENT MEDICAL DIVISION

FREE VACCINATION

The Health Department has established a Vaccination Station at 17 Blossom Street, near Cambridge Street, West End, where all persons residing in Boston may obtain vaccination free of charge every day between the hours of nine and twelve in the forenoon, and two to five in the afternoon, Sundays and Holidays excepted, and on Saturdays between nine and twelve in the forenoon.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				Po	p	ulati	on	760),	400				
Births							19,761	Birth rate	í					26.0
Deaths			9		۰		12,760	Death rate			۰			16.78
	Of	thes	e	tota	1	deat	hs 14.1	per cent were	e	noni	resi	den	ts.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1017

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Comm	issioner	of Health	
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	01 110							
Secretary								1109 City Hall Annex.
Publications		J.					٠	1109 City Hall Annex.
Licenses								1109 City Hall Annex.
Medical Divis	sion							1107 City Hall Annex.
Communical	ole Dis	eases						1107 City Hall Annex.
Child Hygier								1108 City Hall Annex.
Health Unit								17 Blossom street.
Vaccination								17 Blossom street.
Detention H								Southampton street.
Occupationa	l Clinie	3 .						17 Blossom street.
Bacteriologic	al Lat	orato	rv					1101 City Hall Annex.
Examination								1101 City Hall Annex.
Wassermann								1101 City Hall Annex.
Food Inspect	ion D	ivisior	1					1110 City Hall Annex.
Inspection o								1110 City Hall Annex.
Examination	of Mi	lk and	Vine	egar				1104 City Hall Annex.
Inspection o								1102 City Hall Annex.
Brighton Ab								Market street, Brighton.
Sanitary Ins								1111 City Hall Annex.
Abatement	-							1111 City Hall Annex.
Examination								1111 City Hall Annex.
Vital Statisti	ics Re	cords	and	Acc	coun	ts		1112 City Hall Annex.
Permits for								1112 City Hall Annex.
Superintende	ent of	Peddl	ers					27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p.m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

FRANCIS X. MAHONEY, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, SEPTEMBER, 1917.

No. 9

"The nation's best asset—the child."

PHYSICAL EXAMINATION IN THE ADULT.

"If medicine is to render its highest and best service the time must come when all citizens will seek a thorough physical examination once a year or oftener, and diseases should be prevented or detected while yet curable.

"In the past century fifteen years have been added to the average of human life, and a like addition could be secured were well established hygienic laws obeyed."

The truth of the above quotation has been more than manifested during the past few months when thousands of young men were rejected by physicians on exemption boards, and also by army surgeons at the many cantonments throughout the country.

About 25 per cent of the ..men who presented themselves before these boards were found physically defective and this percentage is appalling when we consider that all of these men were between the ages of twenty and thirty years, a period, if ever, when they should be at the height of physical perfection. The most prevalent defects found were defective vision and teeth, underweight, pulmonary and cardiac lesions and deformities of hands, feet or spine.

It is surprising how many people go along for years with markedly defective vision, straining their eyes only to have their attention called to the condition by indirectly asking a physician for advice for headaches, or when actually forced to go to an oculist when the eyes can barely see.

Defective teeth, self evident to the individual, a condition easily corrected, are carelessly allowed to decay until removal

and replacement by bridge work or plates is the only alternative, and in many cases the necessity of replacement is only impressed upon the individual when he calls upon his physician for advice for indigestion.

Pulmonary and cardiac disease, underweights and other conditions are many times only revealed to the suffering individual when he presents himself for examination for life or fraternal insurance, or as a candidate for a position where civil service rules demand a physical examination. He may, at that time, be so far advanced in his physical defect, because of delay, as to be in an incurable condition.

Heart and lung surveys recently made by the United States Army surgeons on officers and men who have been in the army for years resulted in their discharge or transfers to hospitals and sanatoria.

These men were apparently in good health on the previous examination, but since then had contracted a disease revealed only by the periodical routine examination demanded by the government.

The value of frequent medical examinations of everybody is indicated by the foregoing. Its accomplishment presents some practical difficulties. The physical condition of the school child is deemed of sufficient importance to provide for regular medical examinations at public expense, and until we feel prepared to make a similar provision by the city or state for persons over sixteen years of age any other measure tending to the accomplishment of the same object should be encouraged.

TUBERCULOSIS IN MILITARY FORCES.

In the survey the Health Department is making in Boston much interesting information is being obtained. Not the least is the fact that some forty men who had previously been reported to this department as pulmonary tuberculosis cases and are now in our tuberculosis registry, have gone into the army, navy or hospital service of this government or of some foreign power. It is probable that these cases have now no open lesions and are practically well. A number of cases of tuberculosis have been found at the various cantonments among the drafted men when a second examination has been made after their arrival at the camp. These men that have been found tubercular must be discharged and new men drafted in their places. This is an expensive procedure for the government and some of this difficulty might be overcome if a list of all drafted men were

sent to the various city and town health departments before the men were sent to the cantonments. Their names could then be looked up on the tuberculosis registry, and if any had been reported as having tuberculosis this information might be of much advantage to the exemption board.

THE PHYSICAL EXAMINATION OF CHILDREN A NECESSITY.

"The sins of the father shall be visited upon the children even unto the third and fourth generation." This pathetic prediction, written thousands of years ago, is amply manifested by innumerable occupants of our present day schoolrooms. It was on account of the increasing mortality amongst our children, the undermining of their constitutions through neglected ailments, the impoverishment of their bodies on account of improper feeding, that farseeing educators and physicians realized the necessity for establishing on a sound basis a system of medical supervision of school children.

Civilization from time immemorial has been accompanied by a degeneration in the physical condition of the race, and it behooves every parent not only on account of his parental obligations, but because of his duty as a citizen, to see that his progeny are protected from the ravages of disease.

The objects of medical inspection must be recognized as totally distinct from medical treatment, although the one cannot, and must not, be dissociated from the other.

The first important point is the early recognition of the present physical defects. Thousands of children today are suffering from undiscovered ailments, which will only become of serious moment when the children reach the age of puberty if left untreated. Errors of vision, malformations of the body, due to children assuming abnormal positions and certain conditions of nose and throat, for example, come in that category.

A matter of equal importance is to recognize among children those who must be prevented from attending school owing to physical infirmities. Education may be, and is, a necessity; but it is our duty to see that the body is physically fit to absorb it.

If not an invalid start the day's work with a cold shower, even in winter.

TOWNSEND PLACE.



JULY 20, 1917.



SEPTEMBER 18, 1917.

TO MILK USERS.

In view of the constantly increasing cost of milk it is believed to be absolutely necessary that everything be done to prevent waste, particularly the waste and accompanying danger arising from the insanitary, unlawful and improper use and care of milk jars by consumers.

The law prohibits the use of a milk jar for anything but milk. Many misused bottles are in such condition when given back to the dealer that they cannot be economically cleaned and consequently must be destroyed at a cost amounting annually to thousands of dollars.

Help keep down the rising cost of living; use milk jars for milk only; wash them as soon as emptied; promptly return them to the dealer.

GOAT MILK FOR BABIES.

"Goat Milk Good for Babies" is the subject of a bulletin recently published by the New York Agricultural Experiment Station. The bulletin states that from the station's experience with goats it would seem that only in exceptional cases where the use of otherwise wasted feed would reduce the cost of keeping, or with exceptional animals, could goats be expected to produce milk as economically as cows. For family use, however, in places where it is impossible to keep a cow and where a goat or two could be kept, these animals might prove valuable aids in maintaining babies or small children in good health. The milk is palatable, nutritious and easily digested, very helpful in certain cases of poor nutrition, without odor when drawn under proper conditions and with proper care, and practically free from the liability to transmit certain diseases, like tuberculosis, which may be transferred to children from cows.

The odor from goats is decidedly unpleasant at times, but as this is mainly due to the male, the annoyance from this source may be reduced to a minimum where only a few does are kept and under proper conditions.

STOP THE WASTE.

The annual loss from spoilage of milk and cream due to lack of proper cooling at farms amounts to many thousands of dollars, but the question must not be considered solely from the monetary standpoint as applied to the product. It is a larger problem, especially where improperly cared for milk products, which are thought fit to use for food, are given to infants. Their employment under such circumstances is likely to be followed by sickness or worse. In any event the lesson to be learned, and the need therefor cannot be stated too emphatically, is that producers should be aroused to the importance of proper refrigeration of milk before shipment. It is for their interest as well as that of the community in general. Milk products cannot be properly cooled at farms unless ice is used, and there is no reasonable excuse why producers supplying the Boston market should be without ample ice supplies. The importance of cooling milk and cream at the point of production has been emphasized by a letter from the United States Department of Agriculture, which conveys information dealing with this subject, as follows:

Dairy farmers in localities where natural ice is available should make preparations this fall to store an abundant supply of ice for use next summer. The ice pond should be cleaned out and the ice house put in repair before storing commences.

To get milk in good condition to market the dairy experts of the department estimate that the farmer should store one half ton of ice per cow if cream is to be produced and two tons per cow if whole milk is to be shipped. This quantity, if properly stored, should provide the ice necessary for dairy and household use for a year, making due allowance for melting.

Only through the use of ice can dairymen hope in warm weather to get their milk to market with a satisfactorily low bacterial count. Cooling with spring or well water is better than no cooling, but such water is not cold enough to chill the milk to the point where bacteria cease to multiply rapidly. These bacteria, which gain access to the milk during its production and handling, multiply surprisingly as long as the milk is warm. This causes the milk to sour or to take on undesirable flavors and some of them may spread disease. Icing milk on the farm, therefore, is highly important even in moderately cool weather. Inasmuch as much market milk is many hours old before it is consumed, it also is important to keep it as cool as possible throughout its journey from the farm to the distributing point, and the distributer must see that it is kept chilled until it is delivered to the housewife.

Never put ice directly into milk. The ice may contaminate the milk and add water as it melts.

It is not economical to place warm milk directly in a tank of ice water. The milk should first be cooled over a cooler through which passes cold running water from the well or spring. After some of the heat is removed the milk cans should be placed in a tank containing ice and water, which should come well up to the neck of the cans. Frequent stirring of the milk with a clean stirrer hastens the cooling process.

Many tanks waste ice because they are too large for the number of cans chilled. A small tank for cooling one can at a time may be made from a barrel sawed to the proper height.

Insulating jackets should be placed around the cans of chilled milk

whenever milk is to undergo a long haul to the station or be a long time in transit. These jackets will help materially in keeping it cold until it reaches its destination.

PROSECUTIONS FOR VIOLATION OF FOOD LAWS.

Since January 1 the following number of cases have been prosecuted by this department for 572 instances of violation of laws and regulations pertaining to food:

Decomposed eggs .		29	Ice cream			1
Maintaining dirty stores	s,	17	Vinegar .		. ,	5
Selling decomposed food	,*	17	Oleomargarine			20
Milk	. 4	126	Butter .			13
Cream		44				

^{*} This includes turkey, beef, pork and fish.

GERM OF TRENCH FEVER.

The London Times says: Few people realize how great is the debt of gratitude that not only the army but the nation owes to the administrative heads of the Royal Army Medical Corps. They, it is seen clearly, have not stayed their hands. It is common knowledge that typhoid fever has been defeated as has tetanus. Bilharzia, that plague of the Egypt of the old Pharaohs, has been defeated and dysenteries are on the way to defeat. The terrible wound sepsis has been defeated. Only a few enemies remain and the war against them is incessant.

Regarding one member of these remaining enemies, the Lancet makes an important announcement: "An officer of the medical corps had found the parasite that develops in the blood of men infected with trench fever. Working from that he has been able to suggest a new line of treatment." The Lancet dealing with this discovery emphasizes the importance of the obscure war diseases of which trench fever is one. "These diseases are widespread and no man can say how long drawn out their after-effects may be. But it seems from the new work that serious after-effects will not occur. This fresh debt of gratitude is owing because of the discoveries of scientific medicines." One of the after-effects of trench fever is a common disease from which humanity is always widely suffering. Now that the germ of trench fever is discovered it is gratifying that the drug which is its antidote with speedy results is also discovered. Whether this common disease is also attributable always to the

same germ is not yet established, but it is possible that this discovery is likely to lead to wonderful results. Developments are being watched with eager interest, but medical men are unable as yet to make further announcement.

[Ep.—Bilharzia, not "bilharzia," is the name of a parasite which produces the disease "bilharziosis." It is essentially a tropical parasite and the foregoing does not state how the disease could spread in the trenches of northern Europe, if this is to be implied.]

TUBERCULOSIS SURVEY.

The Health Department is at present engaged in a tuberculosis survey of the city. This survey will disclose the actual number of known cases as well as the conditions in which they are to be found. It has been rendered necessary by the fact that present statistical information indicates a larger number of cases of recognized cases of tuberculosis in the city than actually exists, because the same case has often been reported at different times from different sources and from different addresses and not infrequently under different names. In connection with the survey a new system of checking and verifying reported cases has been put in operation to insure the accuracy of statistical information regarding this disease in the future.

The reported cases in Boston from January 1 to October 1, 1917, number 2,392, but excluding the duplicates the actual number is 2,136. Up to the present time 8,000 visits have been made to pulmonary and laryngeal cases that are carried on our tuberculosis registry. A large number of visits is yet to be made, but the results will amply repay the work.

Every health department should make a survey of this sort and if it were done by the Boards of Health all over the state a comprehensive idea of tuberculosis in Massachusetts could be obtained. It might be possible in this way to avoid duplication of cases, not only in the same town but in different towns, as tuberculosis patients move from one place to another.

TWO VALUABLE ACQUISITIONS TO THE STAFF OF THE HEALTH DEPARTMENT.

Dr. M. Victor Safford.

Doctor Safford, late of the United States Public Health Service, and who has been appointed epidemiologist in this department, is a graduate of Dartmouth College, a student of medicine at the University of Pennsylvania and a graduate of Bowdoin Medical School. He has had a wide and varied career in public health and preventive disease work. He comes to the department well equipped with the necessary education, training and experience to make him a valuable asset to this department and of inestimable worth to the citizens of Boston.

His hospital training in New York City, his long connection with the United States Immigration Service at Ellis Island and Boston, his experience in maritime quarantine administration in the British Provinces, special studies and labor on the European cholera outbreak and the recent outbreak of anterior poliomyelitis in this country and his recent Federal duties at the cantonment in the South prove his capacity, worth and versatility in health work. He has also made special investigation of the mills in Massachusetts for the State Board of Labor and Industries and hospital investigations for the Boston Finance Commission.

He is the author of articles relating to immigration, hygiene and medical subjects. He is a fluent linguist, a resident of Boston and a registered physician in Massachusetts.

Dr. Honore Van De Velde.

Dr. Honore Van De Velde, who has been appointed bacteriologist and assistant director of the Bacteriological Laboratory, is a graduate of the celebrated schools of Europe and an associate of the leading bacteriologists and scientists of Europe; he possesses a training and environment that will prove of much worth to Boston.

He has a training and experience that makes him more than a laboratory man. For fourteen years, from 1900 to 1914, he was director of the Bacteriological Institute of the Province of Antwerp. He was formerly assistant to Professor Denys in the Institute of Bacteriology and Serotherapy of the University of Louvain. Doctor Van De Velde is the author of many publications on hygiene, bacteriology and serotherapy, the co-author of the first book ever published on immunization vaccines, and the originator of leucocidin, polyvalent antistreptococcic serum, immunization of patients with autogenous vaccines. He is a resident of Boston and a registered physician in this state.

IMPROVEMENT OF PRIVATE WAYS.

The contrasted photographs in this issue are intended to illustrate one of the many important lines of endeavor under-

taken by the Boston Health Department. This is the improvement of private ways, at the expense of owners of property abutting on the same, by resurfacing and draining, repairing or replacing common drains, and reconstructing steps leading to such passageways. Many of these private ways are in the rear of apartment dwellings, and when improvements of this character are made the result is better living conditions for the occupants of all nearby properties.

The passageway pictured is adjacent to a number of large buildings used for office purposes; and the insanitary and unsightly area that existed here for some time is replaced by a surface that can be readily maintained in a cleanly condition.

To secure this action various means are resorted to. one usually adopted is to invite all the known abutting owners to attend a meeting at the office of the Health Commissioner, when the needs are explained and plans for remedying the defects decided on. A committee is chosen by the owners to ascertain what the work will cost; this committee reports at an adjourned meeting, and the cost is usually apportioned according to the frontage on the alley, or as the owners decide. A statement is then drawn up showing the cost and each owner's apportionment. A treasurer is appointed to hold the money: and, when this is all in his hands, orders are given by him to do the work. One of the police officers detailed for service in the Health Department is assigned to confer with all owners, explain the plan and urge them to pay their share of the cost of the proposed work. This consumes considerable time, for it is necessary to find the real owners; and there are some who object for one reason or another. It is necessary that all join: and the department has no means of compelling cooperation except by an appeal to the criminal courts. Notwithstanding these handicaps, much work was done this summer, notably Hersey place, from Essex street; Utica place, from Utica street; Townsend place, from Carver street; the allevs from 3 Berkeley street and at the rear of the Odd Fellows' Building. corner Tremont street and Berkeley street; Langdon place, off North street; Keith's alley, off North street; Exeter court, Charlestown, repairing surface and new steps to street; Mason court, Charlestown, abolishing old brick sewer and installing modern drain; steps of cement concrete to the alley from 154 Shawmut avenue, and the common drain in the passageway, rear of Bond street.

PULMONARY TUBERCULOSIS CASES INVESTIGATED BY SEX, CONDITION, COLOR AND MOTHER NATIVITY, JANUARY TO JUNE, 1917, INCLUSIVE.

Sex										
Male 136 114 150 129 140 131 169 100 69 Female 89 69 82 86 65 99 100 60 67 Unknown		January.	February.	March.	April.	May.	June.	July.	August.	September.
Female 89 69 82 86 65 99 100 60 67 Unknown	Sex:		İ							ĺ
Unknown.	Male	136	114	150	129	140	131	169	106	98
Conjugal Condition: 225 183 232 215 205 230 269 166 165 Conjugal Condition: Single. 102 84 99 93 85 96 111 58 66 Married. 81 72 79 73 62 81 97 70 71 Widowed. 12 4 8 9 18 25 16 13 7 Divorced. 5 1 4 5 4 2 1 2 2 Unknown. 25 22 42 35 36 26 44 23 19 Totals. 225 183 232 215 205 230 269 166 165 Color: White. 206 170 204 193 185 211 239 150 147 Chinese and black. 12 6 16 15 13 13<	Female	89	69	82	86	65	99	100	60	67
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United States. 30 16 37 33 23 25 30 22 16 Ireland. 59 54 49 55 46 63 69 45 49 England, Scotland and Wales. 12 5 9 6 9 6 4 4 4 Germany. 2 4 9 4 6 4 5 3 3 Canada. 25 23 26 9 17 20 33 18 19 Sweden. 3 5 4 6 2 2 1 2 2 Italy. 14 13 12 16 12 16 15 14 12 France. 2 1 1 Russia. 17 12 23 23 19 32 29 19 10 Other countries. 42 33 40 16 18 9 19 9 11	Mother Nativity:									
Ireland. 59 54 49 55 46 63 69 45 49 England, Scotland and Wales. 12 5 9 6 9 6 4 4 4 Germany. 2 4 9 4 6 4 5 3 3 Canada. 25 23 26 9 17 20 33 18 19 Sweden. 3 5 4 6 2 2 1 2 2 Italy. 14 13 12 16 12 16 15 14 12 France. 2 1 1 Russia. 17 12 23 23 19 32 29 19 10 Other countries. 42 33 40 16 18 9 19 9 11 Unknown. 5 2 13 33 43 34 47 21 20 <td>Boston</td> <td>16</td> <td>16</td> <td>10</td> <td>14</td> <td>8</td> <td>19</td> <td>17</td> <td>10</td> <td>18</td>	Boston	16	16	10	14	8	19	17	10	18
England, Scotland and Wales. 12 5 9 6 9 6 4 4 4 Germany. 2 4 9 4 6 4 5 3 3 Canada. 25 23 26 9 17 20 33 18 19 Sweden. 3 5 4 6 2 2 1 2 Italy. 14 13 12 16 12 16 15 14 12 France. 2 1 1 Russia. 17 12 23 23 19 32 29 19 10 Other countries. 42 33 40 16 18 9 19 9 11 Unknown. 5 2 13 33 43 34 47 21 20	United States	30	16	37	33	23	25	30	22	16
Germany 2 4 9 4 6 4 5 3 3 Canada 25 23 26 9 17 20 33 18 19 Sweden 3 5 4 6 2 2 1 2 Italy 14 13 12 16 12 16 15 14 12 France 2 1 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Ireland</td> <td>59</td> <td>54</td> <td>49</td> <td>55</td> <td>46</td> <td>63</td> <td>69</td> <td>45 .</td> <td>49</td>	Ireland	59	54	49	55	46	63	69	45 .	49
Canada 25 23 26 9 17 20 33 18 19 Sweden 3 5 4 6 2 2 1 2 Italy 14 13 12 16 12 16 15 14 12 France 1 1 2 2 1 1 1 Russia 17 12 23 23 19 32 29 19 10 Other countries 42 33 40 16 18 9 19 9 11 Unknown 5 2 13 33 43 34 47 21 20	England, Scotland and Wales	12	5	9	6	9	6	4	4	4
Sweden. 3 5 4 6 2 2 1	Germany	2	4	9	4	6	4	5	3	3
Italy 14 13 12 16 12 16 15 14 12 France. 2 1 1 Russia. 17 12 23 23 19 32 29 19 10 Other countries. 42 33 40 16 18 9 19 9 11 Unknown. 5 2 13 33 43 34 47 21 20	Canada	25	23	26	9	17	20	33	18	19
France. 1 1 Russia. 17 12 23 23 19 32 29 19 10 Other countries. 42 33 40 16 18 9 19 9 11 Unknown. 5 2 13 33 43 34 47 21 20	Sweden	3	5	4	6	2	2	1		2
Russia 17 12 23 23 19 32 29 19 10 Other countries 42 33 40 16 18 9 19 9 11 Unknown 5 2 13 33 43 34 47 21 20	Italy	14	13	12	16	12	16	15	14	12
Other countries. 42 33 40 16 18 9 19 9 11 Unknown. 5 2 13 33 43 34 47 21 20	France					2			1	1
Unknown 5 2 13 33 43 34 47 21 20	Russia	17	12	23	23	19	32	29	19	10
	Other countries	42	33	40	16	18	9	19	9	11
Totals	Unknown	5	2	13	33	43	34	47	21	20
	Totals	225	183	232	214	205	230	269	166	165

PULMONARY TUBERCULOSIS CASES INVESTIGATED BY KIND OF HOUSE, SANITATION, SLEEPING ARRANGE-MENTS, SPUTUM REPORTS AND HOSPITAL, JANUARY TO SEPTEMBER, 1917, INCLUSIVE.

TO SEPTEMBER, I	917,	INC	LUS	IVE.					
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.
Kind of House:									
Single	23	21	22	25	21	26	28	8	25
Two apartment	29	28	29	15	23	34	36	11	15
Three apartment	68	52	55	62	60	75	89	69	57
Four apartment and over	40	29	45	35	34	20	30	24	38
Hotel		2	1		2	3			
Lodging house	34	24	28	32	18	32	32	30	14
Institution	5	3	7	4	7	5		2	2
Basement	1					1			
Not given	25	24	45	42	40	34	54	22	19
Totals	225	183	232	215	205	230	269	166	165
Sanitation:						:			
Excellent	36	19	30	22	24	14	4]
Good	79	66	79	78	67	96	133	68	77
Fair	58	52	61	60	62	75	60	63	54
Poor	23	15	10	13	12	11	20	13	15
Very poor	1					2	1		1
Not given	28	31	52	42	40	32	51	22	17
Totals	225	183	232	215	205	230	269	166	165
Separate Room:									
Yes	139	109	127	119	121	141	149	108	96
No	43	36	40	49	37	52	60	34	42
Not given	43	38	65	47	47	37	60	24	27
Totals	225	183	232	215	205	230	269	166	165
Separate Bed:									
Yes	150	112	138	131	134	166	171	115	108
No	35	33	34	37	23	30	39	27	30
Not given	40	38	60	47	48	34	59	24	27
Totals	225	183	232	215	205	230	269	166	165
Sputum:									
Positive	58	45	60	41	50	33	25	27	39
Negative	23	19	14	22	14	29	25	8	12
Not given	144	119	158	152	141	168	119	131	114
Totals	225	183	232	215	205	230	269	166	165
Hospital:									
Yes	65	51	55	59	63	61	76	41	40
									100
No	160	132	177	156	142	169	193	125	125

REPORT OF THE HEALTH UNIT FOR THE MONTH OF SEPTEMBER, 1917.

Health Department.

Visits made by m	edica	ıl ins	spect	or:						
Contagious.										21
Tuberculosis										5
Ophthalmia										3
Miscellaneous										71
Total .									•	100
Cases visited by	nurse	s:								
Medical .										218
Babies										319
Total .						•				537
Defective sanitar	v con	ditio	ons f	ound	l in t	ener	nent	hous	ses.	9
Calls by district									•	80
Instruc	tive 1	Dist	rict	Nur	sing	, Ass	ocia	tion		
Visits made by n	urses			•	•	•			•	629
1	Baby	Hy	gien	e As	soci	atio	n.			
Total number of	babie	es ca	red f	or						152
New babies admi	tted									14
Conferences held										3
Total conference	atten	dan	ce							5
Home visits by n										288
Babies readmitte	d						٠			405
Associated	d an	d He	ebre	w F	eder	ated	Cha	ariti	es.	
Cases investigate	d and	d ass	isted						•	3
Consu	mpt	ives	' Ho	spit	al D	epa	rtme	nt.		
Calls by nurses in	n dist	rict								780

SUMMARY OF VITAL STATISTICS.

There were 914 deaths reported in the four weeks ending September 29, against 915 in the corresponding period last year, a death rate of 15.43 against 15.69.

T 1 1 1 1 1		,		,		1 40		
Reported deaths of no	onresi	.den	ts n	umb	ere	d 13	5, again	st 122
last year. Of deaths from report	tabla	dia	0000	a th	o n	nina	inal da	202008
were:	table	uis	ease	S UL	ie b	THIC	ipai dec	creases
were.								
Anterior poliomyelitis								53
Anterior poliomyelitis Tuberculosis (all forms) .								27
FD1 1 .								
The principal increases v	vere:							
Diphtheria								4
Typhoid fever								4
Other important differen	000 777	0300						
Decreases:	ices w	ere.						
								1.0
Cancer		•	٠	٠	٠	٠		16
The principal increases v								_
Pneumonia	r 2 wee	ra)				•		5 17
Diarrhea and enteritis (over	$\frac{1}{2}$ yes 2 vear	s)						13
Accidental and violent .								12
Other causes								39
There were 27 more	death	S 111	nder	1 .	ve91	. 11	less III	nder 5
years, and 20 more over				Τ,	y Cai	,	1000 a.	naci o
,	FOI			KS	ANI	D S	AME P	ERIOD
MORTALITY FOR THE			WEE	KS.	ANI	D S		
MORTALITY FOR THE	IN	JR V	WEE				1917.	1916.
MORTALITY FOR THE	IN	JR V 191	WEE	٠			1917. 914	
MORTALITY FOR THE Total deaths Nonresidents Rate	IN	JR V	WEE 16.	•			1917. 914	1916. 915
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents	IN	JR V 191	WEE	•			1917. 914 135 15.43 13.15	1916. 915 122 15.69 13.42
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents	IN	JR V 191	WEE	•			1917. 914 135 15.43 13.15 225	1916. 915 122 15.69 13.42 198
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years	deduc	JR V 191	WEE	•			1917. 914 135 15.43 13.15	1916. 915 122 15.69 13.42
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents	deduc	JR V 191	WEE			•	1917. 914 135 15.43 13.15 225 249	1916. 915 122 15.69 13.42 198 246
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280	1916. 915 122 15.69 13.42 198 246 291
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths under 5 years Deaths over 60 years	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280	1916. 915 122 15.69 13.42 198 246 291
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria Measles	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217 1916. 53 3 9 3
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria Measles Scarlet fever Tuberculosis (pulmonary) .	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217 1916. 53 3 9 3 1 1 107
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria Measles Scarlet fever Tuberculosis (pulmonary) . Tuberculosis (other forms) .	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217 1916. 53 3 9 3 1 1 107 16
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria Measles Scarlet fever Tuberculosis (pulmonary) . Tuberculosis (other forms) . Typhoid fever	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237 1917. — 13 4 1 — 78 18 5	1916. 915 122 15.69 13.42 198 246 291 217 1916. 53 3 9 3 1 1 107 16 1
MORTALITY FOR THE Total deaths Nonresidents Rate Corrected rate (nonresidents Deaths under 1 year Deaths under 2 years Deaths over 60 years CAU Anterior poliomyelitis Cerebro-spinal meningitis . Diphtheria Measles Scarlet fever Tuberculosis (pulmonary) . Tuberculosis (other forms) .	deduc	191	WEE			•	1917. 914 135 15.43 13.15 225 249 280 237	1916. 915 122 15.69 13.42 198 246 291 217 1916. 53 3 9 3 1 1 107 16

										1917.	1916.
Heart disease	, end	locar	rditi	s, per	ricar	ditis	and	nepl	hritis	149	149
Pellagra .										1	1
Bronchitis										1	6
Cancer .				,						63	79
Diarrhea and	ente	eritis	(ur	nder 2	2 yea	ars)				95	78
Diarrhea and	ente	eritis	(2)	years	and	l ove	er)			1.8	5
Erysipelas										1	1
Meningitis ar	ad er	cepl	nalit	is						3	4
Old age .										1	
Pneumonia										71	66
Premature bi	rth									30	26
Puerperal dis	eases	3								11	8
Rheumatism										2	
Other causes										260	221

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

(4 Weeks Ending SEPTEMBER 29, 1917.)

	TOTAL	CASES.	TOTAL	DEATHS.		Nonres	DEATHS.		
					CAI	3E.5.	DEA	THS.	
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	
751 112 1	071	100	10	0	01	4.7			
Diphtheria	251	123	13	9	31	41	2	1	
Scarlet fever	4 9	43	1	1	19	11		1.	
Measles	72	42	4	3	5				
Typhoid fever	36	43	5	1	5	1	1		
Whooping cough	102 56		10	10	3			2	
Tuberculosis	224	199	78	107	17	16	4	10	

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending September 29, 1917.

CENTRAL DIVISION.

Prosecutions authorized.							9
Stable hearings							2
Temporary stable permits							2
Premises ordered vacated							8
Miscellaneous order					:		1
Applications Lying-in Hospit	tal a	appro	ved				2
Forcible removal ordered .							1
Proposals							4
Culture station approved							1
Appointments							6

Leaves of absence granted	7
Regulation	. 1
Revocation of license rescinded	. 1
Licenses — Permits.	
Transfers	. 2
Hearings	. 3
Hearings	. 1
Grease (licenses to remove) Licenses to peddle fruit and vegetables Manicure — Massage Hen permits	. 74
Licenses to peddle fruit and vegetables	. 40
Manicure — Massage	. 35
Hen permits Numbers assigned Stable permits granted (provisional)	. 323
Numbers assigned	. 60
Stable permits granted (provisional)	. 2
Stable permits granted	
Stable licenses issued	. 2
Sundry license	
Dump permits	. 1
Applications for peddlers' licenses approved	. 50
Sundry license Dump permits Applications for peddlers' licenses approved Vehicles inspected and approved	. 586
remotes inspected and approved	, 900
MEDICAL DIVISION.	
Communicable Diseases.	0.40
Number of visits by medical inspectors	
Antitoxin given	. 20
Deaths investigated	. 15
Cases brought to Boston for treatment	. 89
Vaccinations	. 670
Vaccination certificates	. 298
Antityphoid vaccine administered	. 1
Antitoxin given Deaths investigated Cases brought to Boston for treatment Vaccinations Vaccination certificates Antityphoid vaccine administered Forcible removal recommended	. 1
Public Health Nursing	
Communicable disease visits	2.152
Number of revisits (infants)	5.011
Number of new babies visited	1.203
Total visits by nurses	. 8,369
PACTEDIOLOGICAL LABORATORY	
BACTERIOLOGICAL LABORATORY.	
Examinations for Diagnosis and Release.	
Diphtheria	. 730
Tuberculosis	. 269
Typhoid	. 150
Gonorrhea	. 273
Syphilis	
T. B. Comp. Fix. Test (special examinations)	. 565
Other examinations *	. 136
Bacteriological milk examinations	. 136
Bacteriological water examinations	. 3
Bacteriological ice cream examinations	-
	. 9

^{*}Examination of rats, 112; Genito-Urinary Tuberculosis, 4; Ophthalmia, 23; Malaria, 10; Paratyphoid, 2; Rabies, 2; Anthrax, 2.

FOOD INSPECTION.

Live Stock Inspected								
Cattle inspected		•						973
Calves inspected							0	952
Sheep inspected								0
Sheep inspected Swine inspected								1,859
Animals condemned, whole								4
Parts condemned								372
Stores inspected			٠,					670
								9
Fines								
MILK IN								W
(Examinations as to				irer	nent	s.)		
Samples examined:								
Chemical examinations of milk . Bacteriological examinations of m								1,134
Bacteriological examinations of m	nilk							
Chemical examinations of vinegar	r .							49
Chemical examinations of butter	and	cheese			٠			46
Chemical examinations of ice cre								14
Number of court cases								25
Fines								\$565
	·	Ť	·	·	·	·	·	4000
Inspection of Provision	1s	Artic	les (Con	demi	ned.		
Meat and Fish:	$ \mathbf{N}$	Iiscella	aneou	ıs:				
Poultry 127 pounds		Eggs					46	dozen
Calves' liver 25 pounds Halibut 10 pounds		Potat					7 b	ushels
Halibut 10 pounds		Peach	nes .					ounds
Pork 150 pounds		Apric	ots .				-	ounds
Corned shoulder . 17 pounds		Shrim	an					ounds
Hamburg steak . 1 pound		Pears	,	,				crates
Herring 4,200 pounds								
Steak 3 pounds		Bana	nas .	1		250) bi	ounds inches
Ham 17 pounds								
SANITARY	INIC	DECT	LON	r				
New reports	•		•		•	٠	٠	3,412
New tenement house reports							•	118
Legal notices recommended			4	٠		•	٠	569
	•			•				7,051
Nuisances reported				٠	•	•		5,394
Complaints investigated Number of court cases			•	٠	•			894
	•	•	•				٠	4
Fines		٠		٠				\$ 45
MORBIDITY A	ND	MOR	TAL	ITY	7.			
(35 \								
						1917.		1916.
Total deaths	•				•	9,693		9,658
Nonresident deaths Deaths under 1 year of age	٠					1,431		1,324
Deaths under 1 year of age					•	1,526		1,597

									1917	. 1916.
Pneumonia									1,259	1,267
Cancer .						۰			683	662
Heart disease						٠			1,003	1,073
Diarrhea and	enter	itis 1	ınder	2 ye	ars				314	295
				-						
DE	ATHS	5 FI	ROM					LE DIS	EASES.	
				(35	We	eks.) ·			
										1917. Non-
								1917.	1916.	residents.
Diphtheria								196	143	49
Scarlet fever		٠.,						36	36	12
Measles .								77	100	10
Typhoid feve								.20	12	7
Whooping con					•		•	32	67	3
Tuberculosis	_		•		•	•	. •	877	891	. 79
1 uperculosis		•			•	•	•	011	991	19
CASES	OF	COI	MML	INIC	ABL	E D	ISEA	ASES R	EPORTE	ED.
				(35	We	eks.))			1917.
								1917.	1010	Non- residents.
Diphtheria								2,727		residents.
		•	•	•	•	•	•		1,855	
Scarlet fever				•		•		1,114	1,515	
Measles .							٠	4,939	,	40
Typhoid fever	r .							161	144	22

MONTHLY METEOROLOGICAL SUMMARY, SEPTEMBER.

1,307

2,956

203

536 2,392

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 30.11; highest, 30.59; date, 23; lowest, 29.54; date, 30.

Whooping cough:

Tuberculosis .

TEMPERATURE.

Highest, 83; date, 19; lowest, 40; date, 24; greatest daily range, 26; date, 12; least daily range, 9; date, 8; normal for month, 62.7°.

PRECIPITATION.

Total this month, 1.91; snowfall, 0; greatest precipitation in 24 hours, 1.47; date, 17-18; snow on the ground at end of month, normal for this month, 0.0.

WIND.

Prevailing direction, southwest; total movement, 5,578 miles; average hourly velocity, 7.7; maximum velocity (for five minutes), 25 miles per hour from west, on 6th.

WEATHER.

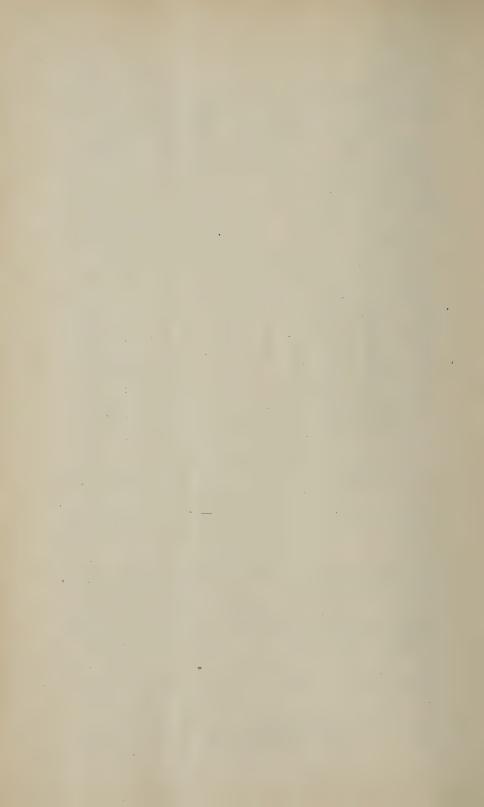
Number of days clear, 16; partly cloudy, 9; cloudy, 5; on which .01 inch or more of precipitation occurred, 7.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 24.29; lunar, 27, 8, 9, 30; hail, 0; sleet, 0; fog, 15; thunderstorms, 20, 1; frost: light, 24; heavy, 0; killing, 0.

GENERAL STATISTICS, 1916.

			-				
Wards.	Land Area in Acres.	Population, 1915 Census.	Persons to Acre of Land. (Using Census Popu- lation.)	Population. Estimated. (July 1, 1916.)	Death Rates, 1916. (Population Estimated.)	Birth Rates, 1916. (Population Estimated.)	Death Rates, 1916, of Children Under I Year per 1,000 Births.
Ward 1	1,080	23,776	22.0	24,253	15.71	22.02	103.00
2	480	41,904	87.3	42,745	15.67	45.15	82.38
3	422	21,016	49.8	21,438	16.23	20.01	132.87
4	403	18,585	46.1	18,958	16.77	19.31	177.60
5	750	77,573	103.4	79,130	13.51	29.32	104.74
6	316	37,250	117.9	37,998	15.79	19.76	94.54
7	500	35,084	70.2	35,788	13.69	11.09	110.83
8	782	38,317	49.0	39,086	11.46	13.25	84.94
9	1,006	33,996	33.8	34,678	16.70	23.70	130.17
10	328	25,741	78.5	26,258	14.51	25.71	88.88
11	863	26,234	30.4	26,761	14.84	24.10	105.43
12	440	29,416	66.9	30,006	17.76	25.26	105.54
13	340	30,533	89.8	31,146	18.82	21.42	125.94
14	689	27,799	40.3	28,357	13.30	21.37	80.86
15	486	26,225	54.0	26,751	13.08	23.29	70.62
16	474	25,404	53.6	25,914	13.24	19.72	56.75
17	540	25,853	47.9	26,372	16.57	20.86	101.81
18	485	25,877	53.4	26,397	10.91	21.33	63.94
19	553	22,748	41.1	23,204	12.41	17.71	97.32
20	1,342	22,958	17.1	23,419	13.02	21.44	79.68
21	1,787	26,499	14.8	27,031	11.21	20.20	69.59
22	2,467	23,812	9.7	24,290	13.50	24.54	90.60
23	4,743	21,442	4.5	21,872	12.57	23.41	56.64
24	3,668	22,615	6.2	23,069	14.61	25.40	102.39
25	1,357	16,401	11.3	16,730	12.49	23.61	75.94
26	1,383	18,381	13.2	18,749	11.57	40.43	55.40
Boston	27,684	745,439	26.9	760,400	16.78	25.77	104.88





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Interest at 4 per cent is paid on these Liberty Bonds twice each year, either by check on the registered bonds or by little printed slips, like tickets, attached to the coupon bonds.

A bond is a thing to strive for, to prize, to keep. It represents money. You can look at it, feel of it, know that you have it — just like a five dollar bill or a ten dollar bill, only better, because it brings you in an income, and should you wish to turn it into money, it can be sold at any time.

Any bank or bond dealer will tell you how to subscribe.

You can pay in instalments.

Will YOU lend YOUR Government \$50, or as much more as you are able, to help win this war?

Remember, you are not GIVING this money. You are LENDING it, SAVING it. It is going to WORK for you and BRING YOU IN AN INCOME and be PAID BACK TO YOU BY YOUR GOVERNMENT.

These Liberty Bonds are the safest bonds on earth. If you cannot shoulder a gun, you can carry a Bond.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				F	op	ulat	ion	7	60,	400				
Births					r ,0		19,761	Birth rate						26.0
Deaths			۰	٠			12,760	Death rate	Э.					16.78
	Of	the	ese	tot	al	deat	ths 14.1	per cent we	ere	non	resi	den	ts.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Commissioner of Health.

Secretary		. 3							1109 City Hall Annex.
Publications									1109 City Hall Annex.
Licenses								٠	1109 City Hall Annex.
Medical Divi								٠	1107 City Hall Annex.
Communica									1107 City Hall Annex.
Child Hygie									1108 City Hall Annex.
Health Unit	; ;	,						٠	17 Blossom street.
Vaccination	Stati	on						٠	17 Blossom street.
Detention I									Southampton street.
Occupations	al Clir	iic							17 Blossom street.
D 4 1 . 1 1	-1.1.	1	4 .						1101 02 11 11 4
Bacteriologic				-				٠	1101 City Hall Annex.
Examination								٠	1101 City Hall Annex.
Wassermann	n Test	S	•	• 1	•		•		1101 City Hall Annex.
Food Inspect	tion	Divi	sion	ı					1110 City Hall Annex.
Inspection of									1110 City Hall Annex.
Examination									1104 City Hall Annex.
Inspection of					-				1102 City Hall Annex.
									Market street, Brighton.
Brighton Al	Jailor		•	•	•		•	٠	Warker street, Drighton.
Sanitary Ins	pecti	on i	Divi	sion					1111 City Hall Annex.
Abatement	of Nu	isan	ces						1111 City Hall Annex.
Examination	n of G	asfit	tters					٠.	1111 City Hall Annex.
Vital Statist									1112 City Hall Annex.
Permits for	Buria	I	•		•	•	•		1112 City Hall Annex.
Superintende	ent o	f Pc	ddl	ers					27 North Grove street.
Supermeende	JIIL U		dul	013					21 Itorui Ciove sufeet.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

FRANCIS X. MAHONEY, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, OCTOBER, 1917.

No. 10

Prevent disease by cooperation.

THE CONTROL OF DIPHTHERIA.

It is only necessary to compare recent reports of any municipal health department with those of twenty-five years ago to see how greatly the mortality from diphtheria has been reduced since the introduction of antitoxin treatment.

In addition to the therapeutic value of antitoxin, its use in conjunction with the Shick test in producing immunity in susceptible individuals now makes diphtheria the least dreaded and most easily controlled of all contagious diseases, which may develop in a military camp or in an institution of any sort where medical surveillance over the inmates can be maintained. So far, however, as the general population in our larger cities is concerned, our knowledge of the means of controlling diphtheria has not in more recent years been reflected in a progressive decrease in the prevalence of the disease. While total cases may fluctuate somewhat from year to year, diphtheria is still disgracefully prevalent in all our larger cities, especially when one considers the large proportion, even of young children, who are shown by the Shick test to possess immunity to infection. Moreover, while the mortality is only a fraction of what it once was, it is still deplorably high. It can be predicted that at the present rate diphtheria will cause over two hundred twenty-five deaths in Boston this year.

The value of our present knowledge of the means of controlling diphtheria depends entirely on the promptness of its application, both as regards prevention and treatment. This department has only authority to take measures for controlling

the spread of diphtheria in the general population after cases have been reported by physicians, and even then the department is restricted in the scope of measures it may apply.

Investigations in Boston, as elsewhere, constantly show that the most important factor in the spread of diphtheria is the unrecognized cases, individuals perhaps going about but actually sick with mild cases of diphtheria, particularly with nasal diphtheria, or persons recovering from acute attacks, rather than healthy "carriers" of the Klebs-Loeffler bacilli. A child has a sore throat or a running nose which the mother attributes to a "cold" and the true nature of the illness is recognized only after investigation as to the origin of a group of cases of frank diphtheria to which this supposed "cold" has given rise. Another factor in the spread of diphtheria has been found to be a tendency of some physicians to accept a single negative laboratory report on an attempt at a swab culture in a case of sore throat as proof of the absence of diphtheria. Both these factors likewise operate to maintain the present death rate from the disease. The mother who assumes that a child has "only a cold," and the physician who lets a single negative laboratory report outweigh his clinical judgment, often discover their mistakes when it is too late for antitoxin to save the child.

It is now apparent that the fight against diphtheria in the general population of our cities cannot progress much further without closer coöperation between official health agencies and the people themselves, and as a step in this direction this department has recently addressed the following letters to the physicians and parents of children in Boston:

TO PARENTS.

Diphtheria continues to be unusually prevalent in many cities and towns of the Commonwealth, including Boston.

Diphtheria is a communicable disease, easily and quickly communicated to others, attacks in all seasons and all ages, preferably children, and oftentimes results fatally.

Parents should watch carefully for any symptoms in their children which might be indicative of diphtheria, because many cases of the disease have been traced to a slight sore throat or a nasal discharge to which parents have paid no heed. The department has found the mild and unrecognized case to be an important factor in the spread of the disease, therefore any child showing a nasal discharge, a sore throat, or like symptoms, should at once be placed in a room apart from other members of the household, particularly children, a physician summoned, and his instructions carefully followed out.

The use of antitoxin is recommended for both curative and preventive

purposes. In cases where parents cannot afford to have a doctor either for diagnosis or to have other members of the family immunized as a preventive measure against diphtheria, this department is ready and willing to send a physician.

Francis X. Mahoney, M. D., Health Commissioner.

TO PHYSICIANS.

HEALTH DEPARTMENT, CITY HALL ANNEX, BOSTON, October 31, 1917.

DEAR DOCTOR:

On account of the unusual amount of diphtheria throughout the Commonwealth, and this includes the Charlestown district of Boston, I wish to ask your coöperation to prevent the spread of this disease in your neighborhood.

Many cases that have come to the attention of the department have been the mild, unrecognized type, showing only nasal symptoms, and which you know is an important factor in the spread of the disease.

Will you not kindly assist this department in seeing to it that where cases of clinical diphtheria come to your attention, even while waiting for a bacteriological diagnosis and although unsupported by such confirmation on the first culture, that they are immediately isolated, antitoxin administered, and members of the household who have come in contact with the patient kept under observation. In cases where parents cannot afford a physician for either diagnostic or immunizing purposes, this department will furnish one upon receipt of such information.

Where proper isolation cannot be maintained, will you kindly have such cases sent to the hospital, and in all cases where you find this necessary and the parents refuse to allow it, this department will have all such cases removed to the South Department for care and treatment.

Thanking you for your kindness and coöperation in this matter, I ${\rm am},$

Yours respectfully,

Francis X. Mahoney, M. D., Commissioner.

EXAMINATION OF SCHOOL CHILDREN FOR DIPHTHERIA.

On account of the increasing number of cases of diphtheria in the Charlestown district it was deeme l advisable to examine the children in the section where the disease was most prevalent.

In coöperation with the school physician this department examined and cultured 450 children in the primary and kindergarten grades in the several schools. No clinical cases of diphtheria were found. Cultures were taken from the nose and throat of each one. The result of bacteriological examination showed five positive cases.

This is the average number of positives that normally occur when a large number of children are examined. In Brighton some years ago cultures were taken from 3,000 children in the schools at a time when there was no unusual amount of diphtheria in this district. About one per cent of the children were found to show K. L. bacilli in their throats.

Children with bacteriological diphtheria are isolated until two successive negative cultures are obtained.

TYPHOID FEVER CAUSED BY CARRIER.

On June 5 of this year, a man twenty-seven years of age, a native of Greece, was admitted to a Boston hospital suffering with typhoid fever. His convalescence was normal, but owing to a persistent bacilluria he was not discharged until September 19, when the bacilli were no longer found. On October 13 an uncle and on October 14 a brother of this man were admitted to a hospital with typhoid fever. Both had been ill for about ten days. It was learned that these two men had been living and getting their meals in the same tenement with the first case since the latter's discharge from the hospital. Search was made for this man and he was finally located. An examination of the urine showed that it was loaded with typhoid bacilli. The stools were negative. Widal reaction was also negative. The man very unwillingly was returned to the hospital by this department where he will be confined until the bacilli have completely disappeared. Undiscovered carriers are undoubtedly responsible for many typhoid cases, but it is only very rarely that it is possible to trace a carrier as in this instance.

MEDICAL SCHOOL INSPECTION.

Medical inspection of schools, while in our vicinity a movement of recent growth, is by no means in its infancy and has long since passed the experimental stage. In France as early as 1833 the school committees of cities and towns were charged with keeping the schoolhouses clean, and a little later the female supervisors of maternal schools (later the kindergartens) were assigned a special duty to watch over the health of the children. The term "school physician," in the modern sense, was probably first employed in Sweden, though at first the duties of the school physician did not comprise the work done by them at the present day. In 1863 they were only obliged to examine with reference to exemption from gymnastics.

Since 1878 school physicians have been required to examine the health of children at the beginning of the school term and réport the results. Probably the first system of medical inspection in the full modern sense of the term was that inaugurated in Brussels, Belgium, in 1874, when school physicians were appointed who were required to visit schools three times each month. In Hungary the law of 1887 provided for school physicians to visit the institutions of learning. Their duties were: The hygienic supervision of schoolrooms, the detailed examination of all children entering school and the giving of lectures in the schools with respect to hygiene. Moscow has had school physicians in her schools since 1888. Besides their other functions these physicians are required to vaccinate and to manage affairs in case of epidemics.

In Japan in 1898 school physicians were appointed by the Minister of Education. Of the work there the following is reported:

The Japanese system of medical inspection extends all over the Empire and reaches the most remote rural community. Thus the Japanese Department of Education is able to tell how many children are in school in the empire, how many are robust, medium or weak, how many have defective eyesight and what diseases are most prevalent at different ages of school life. The department can also tell how many children in school at the age of fifteen years were 150 centimeters tall, how many weighed 40 kilograms and how many had a chest measurement of 75 centimeters. They also can tell the averages of all these statistics and the percentages of robust boys and fat girls.

In the United States the first regular system of medical inspection was here in Boston in 1894. Two years previous, in 1892, the need of medical inspection of schools for the detection of contagious and other diseases among the school children was brought to the attention of the Mayor and City Council, and an appropriation was secured. A delay was occasioned in getting the approval of the school board so that the plan did not go into final operation until November; 1894, when the Board of Health divided the city into fifty districts, selected fifty physicians for the purpose, and began school inspection. In 1906 the Massachusetts Legislature passed a law providing for a system of medical inspection throughout the state.

The Health Department continued the work of medical inspection of school children until June, 1915. The school nurses were under the jurisdiction of the School Committee. In 1915 the work of the medical inspection of schools was transferred by the City Council of Boston to the School Com-

mittee, thus bringing both nurses and physicians under the inspection of one head, the School Committee.

SMALLPOX PREVALENT.

Smallpox continues to be reported in neighboring states and Boston is indeed fortunate for the past few years in that no outbreak of this disease has occurred here.

While the Health Department is always ready for such a contingency would it not be well for each of us to be armed against such an invasion?

This enemy takes a real hold when it makes an assault. The best protection and the only preparedness is vaccination.

See your physician or else call at the vaccination station in Blossom street and be vaccinated.

TO GAS USERS.

On general principles any escape of illuminating gas is dangerous, and with the advent of mantle burners, the numerous new appliances and commercial gas during the last twenty years consumers have become careless, probably not knowing the deadly effects of commercial gas.

From 1912 to October 1, 1917, according to the records of this department there have been 209 deaths from accidental gas poisoning as follows:

1912			24	1915 .			29
1913			24	1916 .			55
1914			39	1917 *			38

Here is a list of the defects which have tended to cause all the accidental gas deaths during the last eight years.

So-called slide pendants, either glycerine or water joint pendants, fixture with two or more keys so close together that in turning off one a person is liable to turn on another, double independent cocks, defective rubber tubing, corroded inside services which are run through coal holes or beneath stairs where exposed to dampness, leaking lead connections where iron pipe is used for soldering nipples, top couplings improperly connected to stem, brass tubing arms not properly cemented or split tubing, loose keys, keys without stop pins, or keys where stop pins bearing have become so worn that key turns completely around.

Keys are ground joints and if not properly cleaned and greased at least once a year they become loose and allow a leakage. When loose there is always the danger of accidentally turning them on after having shut them off, especially by people whose hands have become shaky through age or sickness.

Keys of gas fixtures improperly greased will in a short time wear in the bearing so badly that grease will be of no benefit in preventing the escape of gas. Of course keys without stop pins should never be allowed to remain.

These very common defects can be remedied in many instances if consumers will only take the trouble to examine the fixtures and house piping at least once a year. Defects should be remedied immediately.

SECRETARY DANIELS DEALS WITH THE SOCIAL EVIL.

Dealing frankly and boldly with the social evil as a menace to the nation's military efficiency, Secretary Daniels of the navy in an address before the Clinical Congress of Surgeons of North America, in Chicago, appealed to the medical profession "to end the false and double standard that decreases military effectiveness." The profession, he declared, must share its part of the blame for the "unpardonable prudery that endured a festering evil rather than have it exposed and eradicated."

"There is not an army in the field whose effectiveness is not reduced by reason of immoral disease, 'said Secretary Daniels. "The navy suffers likewise and halts because venereal diseases destroy the manhood of workmen and fighters. During the last statistical year men of the American navy lost 141,378 days' sickness from a small group of absolutely preventable diseases contracted by sin. This means that every day throughout the year there were 456 men disabled by this disgraceful malady."

Menaces Civil Life.

"In civil life the number afflicted is quite as large proportionately as in the military service. It has been printed that Hecht of Vienna stated that at one time the equivalent of three entire Austrian divisions of 60,000 men was under treatment for venereal disease, while the German army in Belgium, representing only a small part of the total German forces, is reported during the first five months of its occupation to have furnished 35,000 such patients. Canadian and Australian officers have

deplored the ravages of this disease. Figures from the British army gave 78,000 cases. Sir William Osler places these infectious diseases at the top as a menace in war and in peace. It is deadlier than smallpox or cancer or tuberculosis. A Canadian authority says:

"Its ravages today are more terrible for Britain and Canada than Vimy Ridge, the Somme and Lens.

"The remedy, there is but one — continence. It must be preached in the home, in the school, in the marts of trade, in the pulpit and military camps and among shipmates afloat.

'You, gentlemen of the medical profession, deal with life and death. You bring the bodies into the world and you close the eyes of the dead. Yours is the ministering function, the intimate touch, and out of such relation you can enjoy an amazing power of suggestion. It is this power that America calls upon you to use. Tell our youths the truth."

TO SAFEGUARD HEALTH.

To safeguard health whether in the family or the camp—Regard every illness as contagious until proved otherwise. Consider bodily excretions as always dangerous to others.

GOATS' MILK.

The use of goats for milk production is a rapidly growing industry, and at the present time, no doubt, in an attempt to obtain milk products at less than the prevailing prices it is increasing rapidly. It must not be assumed, however, that goats thrive on a tin can diet and maintain a large yield of milk. They will consume dry vegetable parings, clippings from vegetable gardens, and many kinds of weeds. In addition to this, milk goats require concentrated foods like those given to cows, pasturage in season, fresh water and a constant supply of salt for giving the best returns.

One feature that has been a big factor in the use of goats' milk is that these animals are practically immune from tuberculosis. Available figures indicate that from 1907 to 1914, inclusive, 579,617 goats were killed in the United States for meat, and not one condemned as tuberculous; while for 1914, 29,738 cows were condemned for tuberculosis.

On the other hand, goats are subject to an infection which

gives rise to Malta fever, and, of course, the use of any animal lacteal secretion as food must always call for precautions against contamination.

STORAGE OF FOOD IN BOSTON.

The following is a list of food articles held in the cold storage public warehouses in Boston October 26. This list does not include the food held in the private warehouses of the whole-sale dealers.

Latest available figures from the books of the cold storage plants:

Meats, all kinds	в.					12,256,541 pounds.
Poultry, all kine	ds .					4,098,753 pounds.
Butter						266,195 pounds.
Eggs						11,028,810 pounds.
Fish						*6,500,000 pounds.
Cheese						4,866,895 pounds.
Pea beans .						180,900 pounds.
Tea						346,700 pounds.
Flour						454,661 pounds.
Salmon, cans .						606 dozen.
Peas, cans .						4,500 dozen.
Sardines, cans .						315 dozen.
Pineapple, cans						3,600 dozen.
Miscellaneous c	anned	goods				12,500 cases.
Condensed milk	cans,					600 dozen.
						900 bushels
Peanuts .						1,040 bushels.
Chocolate .						17,500 pounds.
Wheat food .						5,000 pounds.
Salt						17,500 pounds.
Pierna flour .						21,560 pounds.
Cream and milk						163 packages.

In the past week there have been numerous withdrawals. It is estimated that 10 per cent is a fair average of the amount withdrawn. This does not necessarily mean that such foodstuffs withdrawn have been sold; on the contrary, some of it might have been repacked and returned to cold storage again.

Recently an inspection was made of one of the smaller cold storage plants and numerous lots of poultry were observed that had been in cold storage since September, 1916, and some since October, 1916. Extensions have been granted so that this poultry would not again be put on the market until the Thanksgiving season of this year. There were evidences on some of

^{* 2,000,000} pounds of this total held by the United States Government.

the lots (boxes) that they had been in cold storage previously in New York State. One lot of frozen rabbits piled up to the ceiling were found in one of the rooms and none of the employees knew how long this pile had been there. In several of the rooms broken barrels were observed and frozen turkeys strewn about.

The temperature of these rooms was two to four degrees below zero (Fahrenheit). In one room several hundred boxes containing poultry were frozen en masse, frost covering the outside so that marks on the packages were not discernible. All the cold storage warehouses had the appearances of being filled to capacity, corridors and aisles being used for such storage. In some of the rooms it was impossible to move one foot from the door. It would seem that this is a reversal of good policy to grant extensions of time on cold storage articles as these goods are deteriorating all the time and the loss thus sustained must ultimately be borne by the consumer.

HOW YOU CAN HELP WIN THE WAR.

Conserving food does not mean eating less; it means eating less of some things and more of others.

Eat less wheat — more rye, corn and oatmeal.

Eat less beef and pork — more fowl and eggs.

Eat less animal fat — more vegetable oils.

Eat more of our abundance of perishables, eat more potatoes — save the concentrates, so that we may ship more to our soldiers.

Buy less; cook no more than necessary.

Use local and seasonable supplies.

Patronize your local producers and lessen the need of transportation.

Serve smaller portions; preach and practise the "gospel of the clean plate."

Do not limit the plain food of growing children.

Do not eat between meals.

MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH.

The regular quarterly meeting of the association was held at the New American House in Pittsfield, Mass., Thursday, October 25, 1917.

Addresses of welcome were made by Hon. William C. Moulton, Mayor of Pittsfield; J. Arthur Baker, Esq., president of the Berkshire County Association of Boards of Health.

Congressman Allen T. Treadway read a paper, "The Importance of Modern Public Health Work."

Dr. E. H. Bigelow, chairman, read a paper, "The Work of the Committee on Public Health of the Massachusetts Medical Society."

Dr. John S. Hitchcock, State Department of Health, read a paper, "Rural Sanitation."

Prof. W. Gilman Thompson, M. D., of New York City and Stockbridge, read a paper, "Industrial Hygiene."

Dr. W. J. Gallivan, State Department of Health, read a paper, "Child Conservation in Time of War."

Prof. W. T. Sedgwick, Massachusetts Institute of Technology, read a paper, "Rats and Insects as Public Enemies."

CLEAN HANDS - CLEAN FOOD.

The necessity for cleanliness in the handling of foods should not stop with the oversight of stores; a clean home is equally important. Decency requires clean food in homes. It prevents disease and waste and saves money.

Keep these points in mind.

Put covers or screens over your food to exclude flies and dust. Keep milk cold and covered.

Wash your hands with hot water and soap before eating.

Do not handle food any more than is necessary.

Sick relatives or friends should not be allowed to handle food. Do not allow the attendant for a sick member of the family to handle food without washing her hands.

Stomachs are toothless; chew food well and do not eat too fast. It is the food digested, not that "bolted," which sustains life.

ADVICE TO PARENTS.

If your child is "not feeling well" do not send him to school. When sickness or indisposition comes do not hesitate about calling your physician. Promptness in this matter will save time, expense and trouble.

Any sickness among your children should at once be reported to your physician.

Overcrowded cars, halls and theaters are not the proper environment for the infant or the child.

If you are the child's guardian, guard it against disease, direct it in the pathways of health and strength.

If a contagious disease breaks out in the household do not send the other children away from home. Keep them indoors until the physician arrives.

Sore throats, running noses, rashes, etc., are often forerunners of disease. It is your duty to detect these symptoms and provide for them. Do not be guilty of culpable negligence.

The instructions you receive from the Health Department medical inspector are for the benefit of your child and the community; heed what he says, read the literature that he leaves you, and keep the sick child isolated. Never touch the sign or card that is put on your door as a warning of contagious disease.

Children at home must be afforded just as much protection as the child in school. The good of all is concerned. Medical inspection will discover all cases of communicable disease. Do not try to hide them. Report them at once to the school teacher or to your physician.

Help to protect your child and every child by active coöperation with the Health Department.

REPORT OF THE HEALTH UNIT FOR THE MONTH OF OCTOBER, 1917.

Health Department.

Visits made by	y me	dical	insp	ecto	or:					
Contagious										. 62
Tuberculosi	S									. 4
Ophthalmia		. '				•				. 13
Miscellaneo										
Total								•		. 103
Cases visited l	oy ni	arses	:					^		
Medical								,•	4	. 213
Babies .										
Total										. 650
Defective sani	tary	cond	ditio	as fo	und	in te	neme	ent h	ouse	s, 16
Calls by distri	ct pl	nysic	ian f	rom	Bos	ton I	Dispe	nsar	y	. 129
				100	4.					

Instructive Distri	ct N	ursii	ıg A	SSOC	ciati	ion.		
Visits made by nurses .	•				•			731
Baby Hygi	ene	Asso	ciati	ion.				
Total number of babies care								161
New babies admitted .					•			21
Conferences held					•	•		7
Total conference attendance					•	•	•	4
Home visits by nurses . Babies readmitted .					•	٠	٠	317 324
Dables readmitted .	•		٠		•	•	•	324
Associated and Heb	rew	Fede	erat	ed (Cha	ritie	es.	
Cases investigated and assis	ted .		•		•	•	•	5
Consumptives'	Haer	vital	Don	arti	nor	. +		
Calls by nurses in district	_		_					796
Cans by nurses in district	•		•		•	•	•	190
SUMMARY OF								
There were 1,052 deaths								
November 3, against 1,105 in a death rate of 14.20 against			spon	ding	per	10d l	last y	ear,
Reported deaths of nonre			ımbe	ered	174	9.0%	ainst	166
last year.	biaci	100 11		Jioa	1	., ws	211150	100
Of deaths from reportab	le di	seases	s the	e pr	inci	oal o		
were:							decre	ases
Anterior poliomyelitis							decre	ases
							decre	
Pneumonia	•						decre	73 7
Pneumonia	•	•	•	•	•			73
Pneumonia	•	•		•	•	•	decre	73 7
The principal increases were	• .	•				•	•	73 7 7
The principal increases were	:	•				•	•	73 7 7
The principal increases were Diphtheria	•					•	•	73 7 7
The principal increases were Diphtheria	were						•	73 7 7 . 12 4
The principal increases were Diphtheria	were						•	73 7 7
The principal increases were Diphtheria	were	:		•			•	73 7 7 - 12 4
The principal increases were Diphtheria	were	:		•			•	73 7 7 . 12 4
The principal increases were Diphtheria	were	:		•			•	73 7 7 - 12 4

There were 23 less deaths under 1 year, 59 less under 5 years, and 37 more over 60 years.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

(Five Weeks Ending November 3, 1917.)

	Tomer	Cagna	Tomas	DEATHS.	Nonresidents.					
	TOTAL	CASES.	TOTAL	DEATHS.		SES.	DEATHS.			
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.		
Diphtheria	420	204	23	.11	62	41	9	1		
Scarlet fever	123	. 77	4		35	18	2			
Measles	162	32	3	5	6	1	1	2		
Typhoid fever	27	26		7	1	6		4		
Whooping cough	78	36	3	4	1					
Tuberculosis	247	213	87	82	25	25	8	8		

MORTALITY FOR THE FIVE WEEKS AND SAME PERIOD IN 1916.

Total deaths .

Nonresidents .

1917.

1,052

1916.

1,105

174 166

Tionicolaction		*				٠.	•		TIT	100
Rate									14.20	15.16
Corrected rate (nonres	iden	ts de	educt	ed)					11.86	12.88
Deaths under 1 year			4						153	176
Deaths under 2 years									195	221
Deaths under 5 years									225	284
Deaths over 60 years							•		356	319
	CA	AUS	ES (OF :	DEA	тн.				
4									1917.	1916.
Anterior poliomyelitis										73
Cerebro-spinal mening	itis _			•		•		•	3	4
Diphtheria									23	11
Malaria	•					•			900444	1
Measles	•				* 17				3	5
Scarlet fever					•				4	_
Tetanus									-	
Tuberculosis (pulmona	ry)		_*						87	82
Tuberculosis (other for									8	13
Typhoid fever .									Mexicon	7
Whooping cough .									3	4
Accidental and violent									77	86
Heart disease, endocar									233	224
Pellagra									1	1
Bronchitis						•			7	9
Cancer									87	83
Diarrhea and enteritis									49	40
Diarrhea and enteritis									10	7
Erysipelas									National Contract of Contract	3
Meningitis and enceph	alitis	3							5	4

								1	917.	1916.
Old age								. 1	4	1910.
Pneumonia						•	•	1	00	107
Premature birth							•	_	29	34
Puerperal diseases .				· ·	Ċ		·		4	7
Rheumatism			·	· ·		i			3	
Influenza					·				4	
Other causes								3	08	300
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Weeks Ending	NO	vem	ber	٥, ا	1917	•				
C	EN	TRA	L D	IVIS	ION.					
Prosecutions authorized										1
					•					4
Stable hearings Temporary stable permit	•								٠	3 1
Premises ordered vacated		•								6
Miscellaneous order .										1
Application lying-in hospi									•	1
Forcible removal ordered	.021 2	thbro	vea.	•					•	1
									•	2
Proposals		•				•			•	1
Appointment									•	2
Leaves of absence granted									•	3
Leaves of absence grantee	1	•		•	•	•			•	J
	Lice	ense	s — P	ermi	ite					
Transfers										1
True 1		•							•	$\frac{1}{2}$
~							•		•	1
Grease (licenses to remove	non	·		•	٠				•	75
Licenses to peddle fruit an					•		•	•	•	20
Manicure — Massage .	iu v	egeta	DICS	•		•	,	•	•	65
Hen permits	•			•		٠			•	112
Hen permits		•				٠	•		•	28
Stable permit granted (pro						٠	,	•	•	1
Stable permit granted (pro	0 4 181	ionai,				٠	•		•	1
Stable permit granted . Stable licenses issued .								•	•	2
Sundry license								•	•	1
		•								3
Dump permits	lice	ngeg (nnrc	ved.		•		•	•	629
Vehicles inspected and app	arov	ed.	appro	, voa		•		•	•	45
4.1				•			•	•	•	1
	·									1
N	IED	ICAI	L DI	VISI	ON.					
Co	mm	umic	ablo	Disc	2250	2				
,				1013	ouses	76				0.0=
Number of visits by medic										607
Antitoxin given										38
Deaths investigated					•			•	•	13

Vaccinations Vaccination cert Antityphoid vac Forcible remova	o Boston cificates ccine adn ls recom	inis men	: tered	d .	•		•				•	120 122 120 1 4
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.Communicable of				٠	٠	٠	٠	٠	٠	٠	•	2,505
Number of revis Number of new	sits (infai	nts)		. •				• •	٠	. •	•	5,479
Number of new	pables v	isite	a	•		•	•	•	٠	٠	•	833
Total visits	by nurs	es		• •			٠	• •	٠			8,817
]	ВАСТЕ	RIO	LOC	iICA	LI	.AB(ORA	TOF	ξΥ.			
Ex	aminat	ions	s for	r Dia	agn	osis	and	Rel	ease			
Diphtheria .								٠				2,191
^_					•	·						464
												136
Gonorrhea.												577
Syphilis .												742
Syphilis T. B. Comp. Fix	x. Test (s	spec	ial e	xami	nati	ons)						743
Other examinati	ions *											200
Other examination Bacteriological in	milk exa	mina	tion	s.			٠.		a.			816
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Live	Stock	Inc					11011		atto			
	e Stock		spec	teu	at i	origi						
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Cattle inspected	l .	•						•				1,780
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^{*}Examination of rats, 128; Genito-Urinary Tuberculosis, 6; Ophthalmia, 41; Malaria, 10; Paratyphoid, 10; Rabies, 2; Anthrax, 1; Urine, 2; Feces, 1.

Inspection of Provisions — Articles Condemned.

Most and Eight	
Meat and Fish:	Meat and Fish:
Poultry 40 pounds	Salami 350 pounds
Calves' liver 3 pounds	Duck 20 pounds
Pork 29 pounds	Moose meat 160 pounds
Hamburg steak . 4 pounds	Clams 103 pounds
Herring 250 pounds	Salmon 1 can
Ham 20 pounds	Fresh shoulder . 10 pounds
Fish 7 pounds	Smoked shoulder . 28 pounds
Scallops 5 gallons	Bologna $2\frac{1}{2}$ pounds
Beef 11 pounds	Liver $3\frac{1}{2}$ pounds
Bacon 9 pounds	Spare ribs 19 pounds
Beef tongues . 60 pounds	Plucks 60 pounds
Lamb tongues . 34 pounds	Tideks
Lamb chops 3 pounds	
Salt pork 37 pounds	Miscellaneous:
Head cheese 4 pounds	Flour 600 pounds
Frankfurts 29 pounds	Carrots 4 pounds
Beef 100 pounds	Beets 2 pounds
Rennit 10 pounds	Grapes 3,750 pounds
itening To pounds	Grapes 6,750 pounds
CANITADY	INSPECTION.
New reports	4,035
New tenement house reports	171
Legal notices recommended	
Reinspections	7,903
Nuisances reported	5,837
Complaints investigated	1,125
Number of court cases	4
Fines	
MORBIDITY AN	ND MORTALITY.
(40 V	Veeks.)
	1917. 1916.
Total deaths	10,745 10,763
Nonresident deaths	1,605 1,490
Deaths under 1 year of age .	1,679 1,773
Pneumonia	1,359 1,374
Cancer	
Heart disease	1,163 1,219
Diarrhea and enteritis under 2 years	363 335
DEATHS FROM COM	MUNICABLE DISEASES.
(40 V	Veeks.)
`	1917. Non-
	1917. 1916. residents.
Diphtheria	219 154 58
Scarlet fever	40 36 14
Measles	80 105 11
Typhoid fever	20 19 7
Whooping cough	35 71 3
Tuberculosis	964 973 87
-	

CASES OF COMMUNICABLE DISEASES REPORTED.

				(40	Wee	ks.)			1917. Non-
							1917.	1916.	residents.
Diphtheria							3,147	2,059	475
Scarlet fever							1,237	1,592	266
Measles .							5,101	5,030	46
Typhoid fever	r						188	170	23
Whooping cou	ıgh	٠					614	1,343	8
Tuberculosis							2,639	3,169	228

MONTHLY METEOROLOGICAL SUMMARY, OCTOBER.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 30.06; highest, 30.45; date, 18; lowest, 29.28; date, 30.

TEMPERATURE.

Highest, 71; date, 19; lowest, 37; date, 12; greatest daily range, 28; date, 30; least daily range, 5; date, 10; normal for month, 52.3°.

PRECIPITATION.

Total this month, 5.33; snowfall, T; greatest precipitation in 24 hours, 1.81; date, 24; snow on the ground at end of month, normal for this month, 0.0.

WIND.

Prevailing direction, southwest; total movement, 8,108 miles; average hourly velocity, 10.9; maximum velocity (for five minutes), 48 miles per hour from west, on 24th.

WEATHER.

Number of days clear, 11; partly cloudy, 6; cloudy, 14; on which .01 inch or more of precipitation occurred, 14.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 4, 15, 26, 29; lunar, 26, 27; hail, 0; sleet, 0; fog, 0; thunderstorm, 28; frost: light, 23; heavy, 12, 21; killing, 0.

DO YOU KNOW THAT

Civilian health is the rock upon which military efficiency rests?

Every man is the architect of his own health?

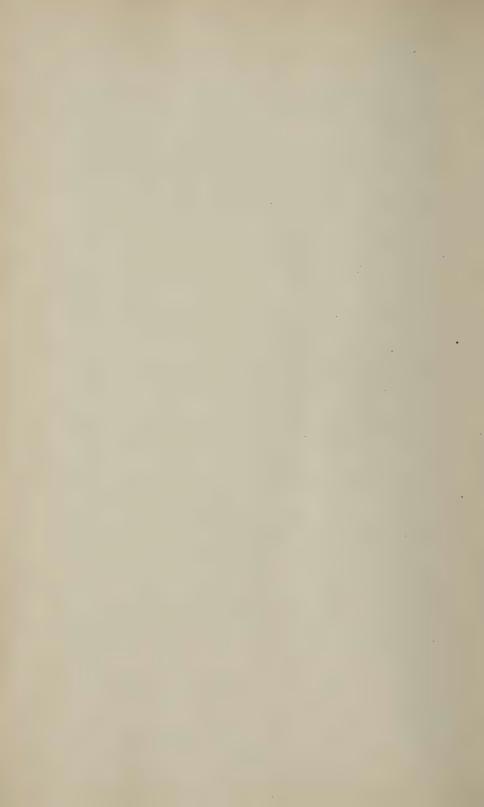
Life is a constant struggle against death?

Sedentary habits shorten life?

(240)

GENERAL STATISTICS, 1916.

Wards.	Land Area in Acres.	Population, 1915 Census.	Persons to Acre of Land. (Using Census Popu- lation.)	Population. Estimated. (July 1, 1916.)	Death Rates, 1916. (Population Estimated.)	Birth Rates, 1916. (Population Estimated.)	Death Rates, 1916, of Children Under I Year per 1,000 Births.
Ward 1	1,080	23,776	22.0	24,253	15.71	22.02	103.00
2	480	41,904	87.3	42,745	15.67	45.15	82.38
3	422	21,016	49.8	21,438	16.23	20.01	132.87
4	403	18,585	46.1	18,958	16.77	19.31	177.60
5	750	77,573	103.4	79,130	13.51	29.32	104.74
6	316	37,250	117.9	37,998	15.79	19.76	94.54
7	500	35,084	70.2	35,788	13.69	11.09	110.83
8	782	38,317	49.0	39,086	11.46	13.25	84.94
9	1,006	33,996	33.8	34,678	16.70	23.70	130.17
10	328	25,741	78.5	26,258	14.51	25.71	88.88
11	863	26,234	30.4	26,761	14.84	24.10	105.43
12	440	29,416	66.9	30,006	17.76	25.26	105.54
13	340	30,533	89.8	31,146	18.82	21.42	125.94
14	689	27,799	40.3	28,357	13.30	21.37	80.86
15	486	26,225	54.0	26,751	13.08	23.29	70.62
16	474	25,404	53.6	25,914	13.24	19.72	56.75
17	540	25,853	47.9	26,372	16.57	20.86	101.81
18	485	25,877	53.4	26,397	10.91	21.33	63.94
19	553	22,748	41.1	23,204	12.41	17.71	97.32
20	1,342	22,958	17.1	23,419	13.02	21.44	79.68
21	1,787	26,499	14.8	27,031	11.21	20.20	69.59
22	2,467	23,812	9.7	24,290	13.50	24.54	90.60
23	4,743	21,442	4.5	21,872	12.57	23.41	56.64
24	3,668	22,615	6.2	23,069	14.61	25.40	102.39
25	1,357	16,401	11.3	16,730	12.49	23.61	75.94
26	1,383	18,381	13.2	18,749	11.57	40.43	55.40
Boston	27,684	745,439	26.9	760,400	16.78	25.77	104.88





"In the training camps large bodies of men, selected primarily from the youth of the country, will be gathered together who will be at that plastic and generous period of life when their service to their country should be surrounded by safeguards against temptations to which they are not accustomed. We are bound, as a military necessity, to do everything in our power to promote the health and conserve the vitality of the men in the training camps."

Secretary of War Baker.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1916.

				P	op	ulat	ion	76	0,4	.00				
Births					(_e		19,761	Birth rate						26.0
Deaths		۰	e e		٠		12,760	Death rate	٠			٠	,	16.78
	Of	the	ese	tot	al	dea	ths 14.1	per cent wer	e.	non	resi	den	ts.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1917

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Secretary						1109 City Hall Annex.
Publications						1109 City Hall Annex.
Licenses				٠	٠	1109 City Hall Annex.
Medical Divis	sion				٠	1107 City Hall Annex.
Communicat	ole Dis	eases	۰			 1107 City Hall Annex.

Commissioner of Health.

Superintendent of Peddlers 27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

FRANCIS X. MAHONEY, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, NOVEMBER, 1917.

No. 11

Health Conservation is True Preparedness.

SOME FACTS ABOUT PNEUMONIA.

Other acute diseases fade into relative insignificance in comparison with pneumonia as a cause of death. Lobar pneumonia killed about one thousand persons in Boston last year and Boston's death rate is lower than some other cities. Pneumonia seems at present to be becoming a more frequent rather than a less frequent cause of death everywhere. Pneumonia may end the life of a person whose vitality has been weakened by some other disease or by overwork, worry, loss of sleep, alcoholism, but it will also strike down the apparently strong and healthy in true epidemic fashion. More than one half of the cases of pneumonia occur between the ages of twenty and fifty.

While recent research work in acute lobar pneumonia has brought out some puzzling facts apparently inconsistent with previous theoretical assumptions, it has nevertheless gone far toward indicating the means of controlling the disease.*

Many different pathogenic organisms may give rise to lobar pneumonia but only in exceptional instances is the condition caused by any organisms other than some variety of the Diplococcus pneumoniæ. Four types of the Diplococcus pneumoniæ are recognized, known as types I., II., III., IV. Sub-types of type II. are also recognized and type IV. apparently includes various sub-varieties. About one third of all cases of lobar pneumonia appear to be due to type I., one third to type II., about one eighth to type III., and about one fifth to type IV. The mortality for the different types would appear to be about as follows: Type I., 25 per cent; type II., 32 per cent; type III., 45 per cent; type IV., 16 per cent. The determination of the type in any case may be made in the

^{*}For a summary of the work of recent investigators see "Acute Lobar Pneumonia, Prevention and Serum Treatment," monograph of the Rockefeller Institute, No. 7, October 16, 1917.

laboratory by an agglutination test or specific precipitin reaction after intra-peritoneal inoculation of a mouse with the patient's sputum. Usually the type can be indicated by the latter method within ten hours of the receipt of the sputum by the laboratory. Often in types I., II., and III. the patient's urine will give the precipitin test with anti-pneumococcic serum. An early reaction with a patient's blood indicates a grave prognosis.

An anti-pneumococcic serum is prepared which acts, when given early, almost as a specific in cases of pneumonia due to the type I. pneumococcus. It is prepared by inoculating horses with dead or living cultures of type I. pneumococci. Its preparation is decidedly more difficult than for diphtheria antitoxin. It must be given in comparatively large amounts, usually 90 to 100 c. c. as an initial dose. It should preferably be given intravenously, and preliminary tests for sensitiveness to horse serum and, if present, desensilization is advised. Similar attempts at the production of a therapeutic serum for the other types of pneumonia have thus far been disappointing. Anti-pneumococcic serum is now being made at the laboratory of the Massachusetts Department of Health but in such small amounts that it is being supplied only to hospitals.

Pneumonia is a contagious disease and its prevention must depend upon a practical recognition of this fact. It has long been known that the pneumococci may be found in the mouths of healthy individuals. Type III., or the pneumococcus mucosus, which gives rise to the least common but most fatal form of pneumonia, is found in the mouths of over 25 per cent of normal healthy individuals. Type IV., which stands next to type III. in disease incidence and which causes the most benign form of pneumonia, is found in the saliva of perhaps 50 per cent of healthy persons. On the other hand, types I. and II., which cause the majority of all cases of pneumonia, are rarely found in the mouths of normal persons, except those who have been in intimate association with actual cases suffering from these types of the disease. In other words, it would appear that while types III. and IV. might conceivably under certain conditions cause pneumonia in persons who habitually harbor organisms of these types in their mouths, it would seem that types I. and II. pneumonias, constituting a majority of all cases of the disease, are due to infection transmitted from actual cases of type I. or type II. pneumonia.

Pneumococci have not yet been isolated from out-of-doors air or dust. Pneumococci may be found in the dust of rooms.

When found they will correspond to the types of the organism to be found in the mouths of the persons inhabiting the rooms. In such instances pneumococci can no longer be recovered from the room dust after the room has been cleaned with soap and water. In dry dust collected from the rooms of patients with the disease the pneumococci have been found to retain their vitality for weeks.

Like tuberculosis, pneumonia is spread by the sputum of pneumonia patients and perhaps also by the sputum of healthy pneumococci carriers. Whether an exposed individual will develop the disease will depend, as in tuberculosis, upon the dosage, the number and virulence of the bacteria he inhales and his power of resistance to the organism. Like tuberculosis, indoor conditions are practically necessary for securing the proper dosage of pneumococci, and given crowded indoor conditions plus a case of pneumonia an epidemic inevitably follows. Even under such conditions many individuals will still prove immune to infection, but immunity to one type of pneumococcus does not imply immunity to another.

Susceptible animals may be easily immunized by inoculations with either living or killed pneumococci and experiments have now been carried far enough to show that human beings may also be thus protected against pneumonia by vaccination as against typhoid fever. Owing to the frequency of outbreaks of pneumonia in military camps the vaccination of soldiers against pneumonia has been strongly advocated, and by combining the types of pneumococci with the different strains of meningicocci in the same vaccine it is possible that protection against both pneumonia and cerebrospinal meningitis might be secured at the same time. There has, however, been a hesitancy about adopting this procedure as a routine measure for the following reasons. While as yet we cannot tell in advance whether a given individual may be immune to one or both of these diseases we know that the great majority possess such natural immunity and do not need vaccination; we do not know how long the artificial immunity produced by vaccination may protect against these diseases. Then too our knowledge of the way these diseases spread may be utilized to prevent their spread without vaccination. If, however, some simple test should be discovered to indicate whether or not an individual might be susceptible to pneumonia similar to the Shick test for susceptibility to diphtheria, vaccination against pneumonia would undoubtedly become a common practice in both military and civil life.

SMALLPOX IN BOSTON.

During the first two weeks of December four smallpox cases were discovered in Boston, and upon confirmatory diagnosis by this department they were removed to the Detention Hospital for isolation, care and treatment.

All four cases were adults, three males and one female. Two were located in the Back Bay section of the city, one in East Boston and the fourth in the West End.

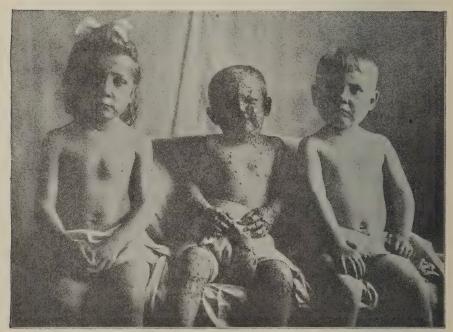


Fig. 1.—Three members of one family brought to the Municipal Hospital of Philadelphia with the mother and father, who had smallpox. Child in center was not vaccinated, as it was considered too young. The other children were vaccinated one year before, and remained free of the disease although living in the smallpox wards for several weeks. (From "Acute Contagious Diseases," Welch and Schamberg.)

All known people who have come in contact with these cases have been vaccinated either at home or at their places of employment, disinfection has been carried out and every precaution taken to prevent the spread of the disease.

The last large outbreak of smallpox in this city was in 1901–02–03, and in the fourteen years since then up to the present time only fifty cases have been reported in Boston.

Every effort is being made by the Health Commissioner to encourage vaccination, generally, inasmuch as this is the only successful weapon with which to fight this dreaded and loathsome disease. It is suggested, and strongly recommended, that all citizens who have not been successfully vaccinated within seven years have their family physician carry out a successful inoculation.



Fig. 2.— Mother and daughter. The daughter, through vaccination, although exposed, did not contract the disease.

The following letter has been sent to every physician in Boston to all large industrial and mercantile establishments, and to all corporations employing men in large numbers:

HEALTH DEPARTMENT, Boston, December 12, 1917.

DEAR SIR:

Cases of smallpox have been discovered in Boston during the past week that have been walking about and riding in the elevated trains and street cars, thereby exposing the community to infection.

The Health Commissioner earnestly recommends and strongly advises everyone, both adult and child, who has not been successfully vaccinated within seven years, to be vaccinated at once. This is your bounden duty, not only for your own personal protection, but for the public welfare. Let no one, or no argument, keep you from doing your duty Now.

Smallpox is so readily controlled by vaccination that it is almost criminal for a person not to take advantage of such a protective measure. The slight inconvenience arising from vaccination is as nothing when compared to the ravages of the disease itself. If a person happens to be immune there is no inconvenience at all.

There is no physical condition which contra-indicates vaccination, and if there is an extensive outbreak of the disease in this city it will be the fault of the citizens themselves in refusing to take advantage of precautionary measures.

Would you kindly have this matter brought to the attention of all employees and others in connection with your establishment and see that these recommendations are complied with, as the holiday season is here and it may be of great commercial and financial value to you.

Sincerely yours,

F. X. MAHONEY, Health Commissioner.

SMALLPOX.

- 1. Infectious Agent.— Unknown.
- 2. Source of Infection.— Lesions of the skin and mucous membranes of infected persons.
- 3. Mode of Transmission.—By direct personal contact; or by articles soiled with discharges from lesions.
- 4. Incubation Period.— Twelve to fourteen days.
- 5. Period of Communicability.— From first symptoms to disappearance of all scabs and crusts.
- 6. Methods of Control:
 - (A) The infected individual and his environment
 - 1. Recognition of the disease Clinical symptoms.
 - 2. Isolation Hospital isolation until the period of infectivity is over.
 - 3. Immunization Vaccination.
 - 4. Quarantine Segregation of all exposed persons for fourteen days from date of last exposure, or until protected by vaccination.
 - 5. Concurrent disinfection of all discharges and articles soiled therewith.
 - 6. Terminal disinfection Thorough cleansing and disinfection of premises.
 - (B) General measures —

General vaccination in infancy, revaccination of children on entering school, and of entire population when the disease is prevalent.

HEALTH DEPARTMENT CITY OF BOSTON

HAVE YOU BEEN VACCINATED RECENTLY?

SMALLPOX

Is reported from various places in New England and elsewhere.

A person may have the disease and not know it.

Those who come in contact with such a person may contract SMALLPOX.

SMALLPOX IS PREVALENT.

If You Have No Private Physician To Vaccinate You, Telephone The Health Department, Fort Hill 5100.

GET VACCINATED NOW.

FRANCIS X. MAHONEY, Commissioner.

The above is a facsimile of card, 13 inches by 22 inches, which this department is posting in principal places about Boston where the public is likely to read it, such as railroad, subway, elevated stations, large stores, industrial establishments, public lodging houses, barber shops, drug stores, etc.

RELATION OF KINDERGARTEN TO SPREAD OF CONTAGIOUS DISEASE.

It occurred to me that the relation of the kindergarten to the spread of disease was one of the most important subjects not already treated by this department in "Educational Standards."

In presenting this subject, I will discuss the practical points in prevention of contagion.

It is well known that the child of kindergarten age, four to five and a half, is most susceptible.

Scarlet fever steadily diminishes after the fifth year.

Measles is so contagious that few escape, and for that reason there is more danger of the spread in kindergartens, as many are immune in other classes owing to a previous attack.

Diphtheria.— The greatest susceptibility is between two and five years. In Berlin, among 2,711 cases, 1,235 occurred from two to five years inclusive.

Pertussis.— Susceptibility is great and only equalled by measles. In 4,591 cases reported by Holt 904 were between three and four years and 803 between four and seven; over seven, 189 cases.

Acute Anterior Poliomyelitis (Infantile Paralysis).—Boston had 406 cases in 1916 up to and including October 23. There were:

Under one year			٠.		64
Under two years					137
Under three years					83
Under four years					
Under five years					30
Between five and t	en	years			21
Over ten years.					20

This clearly demonstrates that the greatest susceptibility during the school age occurs in that of the kindergarten; under four years, 51 cases and under five, 30.

"The germ of diphtheria is very resistant and cultures have been made from a bit of membrane preserved for five months in a dry cloth. Incorporated with dust and kept moist, the bacilli were still cultivable at the end of this period."— Osler.

The germs of these diseases are easily destroyed by disinfectants, but for obvious reasons, powerful chemicals cannot be used in class rooms. All that can be expected is to reduce the communicability to a minimum degree and make the supervision and precautions consistent with the best prophylactic measure, that circumstances will permit. While it is not practicable to use powerful disinfectants in class rooms, advantage may be taken of natural germicides sun and fresh air. The generous use of soap and water is also recommended.

When furniture has been exposed to contagious disease it should be disinfected by the janitor, on recommendation of the principal and the school physician. Books may be destroyed.

In addition to this, all toys and other articles handled by the infected child should be boiled, if adapted for this treatment. Some objects can be soaked in sulpho-napthol solution (teaspoonful to a pint of water) without injury.

Certain objects should be destroyed. The teacher is in a position to know if the child has really been in contact with supplies. It would be poor judgment to destroy books and other property without due consideration. Consultation with the school physician and nurse in this case will be advantageous.

Remember that light, fresh air and dryness are unfavorable to the development of germs; that darkness, impure air and moisture are favorable. The germs of most diseases incident to childhood are short lived when exposed to the former.

It is pertinent here to refer to a custom that I understand is quite common in certain schools, the frequent omission of open-air recess. There are very few occasions where this measure is necessary. From a hygienic standpoint it is to be deprecated. This is especially true if it applies to the kindergarten grades. The loss of relaxation reduces the normal resistance to disease, thus favoring contagion.

Too much emphasis cannot be placed on the importance of exposing all articles in the class room to the sun and air.

Sand and clay should be renewed frequently, and when not in use left in a dry, sunny place. All such materials should be exposed by placing them in the yard at frequent intervals during the year. Vacation periods offer an excellent opportunity for the thorough sunning and airing of not only the room but all articles in it.

Kindergartens are invariably on the first floor. Proper ventilation obviates dampness of the cellar.

Older children, more readily than kindergartners, absorb instruction on the danger of placing objects, such as pencils, in the mouth, sharing gum, candy, and other sweets. Rudimentary principles of prophylaxis cannot be too early inculcated.

With due precautions conditions in the kindergarten are no more hazardous than outside conditions in homes and in the street. As a matter of fact, the ordinary child's physical welfare is safer under the supervision of the school physician, teacher and nurse.

The supply list of the kindergarten is so complex that it cannot be discussed here in detail. The equipment in the class room would indicate that many articles are adapted for the treatment prescribed. With careful inspection it will be necessary to destroy but few articles.

Care of the teeth is an important factor in the spread of contagious diseases, and the kindergarten offers a fertile field for dental prophylaxis. Hints to pupils and parents on the importance of cleanliness of the teeth will not only prevent much trouble in later life from dental decay, but will render the child less susceptible to communicable disease.

To summarize:

Hygienic measures for kindergarten class rooms are essentially the same as for other class rooms.

The maximum of susceptibility to contagious diseases prevails in the kindergarten grades.

Danger of contagion is greater because of increased facilities for direct contact.

Precautionary measures reduce contagion to a minimum.

The kindergarten is a promising field for dental prophylaxis.

Dr. William H. Devine, Medical Director Boston Schools.

PREVENT RESPIRATORY DISEASES.

Coughs, "colds," grippe and pneumonia are caused by germs that come from the mouths or noses of other persons.

Therefore, to prevent diseases:

- A. Do not allow germs to gain entrance into the mouth or nose.
 - B. Do not allow your physical condition to go below par.
 - C. If you are sick do not expose others.

A. To Prevent Germs from Getting into the Mouth or Nose.

- 1. Avoid persons who are coughing or sneezing.
- 2. Keep fingers and pencils away from the mouth.
- 3. Outside the home use individual drinking cups; at home see that cups are properly washed.
 - 4. Avoid crowds.

B. To Keep the Body Strong.

- 1. Do not allow yourself to get tired, hungry or cold.
- 2. Sleep and work in rooms filled with fresh air, avoid drafts and keep the body warm.
 - 3. Take plenty of exercise in the fresh air.
 - 4. Eat simple, nourishing food but avoid alcoholic drinks.
 - 5. Never let the body get too hot or too cold.
 - 6. Dress according to the weather conditions.

C. To Keep Germs from Others if You Get Sick.

- 1. Cover your nose or mouth with a handkerchief when you cough or sneeze and turn your face away from others.
- 2. If you have a cold or are subject to sneezing keep away from crowds.
 - 3. Wash your hands frequently.
 - 4. Do not expectorate on floors, streets or cars.

IMPROVEMENT IN LOGGING CAMPS IN MAINE.

It is refreshing to learn that the new State Health Commissioner of Maine and the Health Council are taking steps to remedy the insanitary conditions and eliminate the evils that predominate and have prevailed for years in the logging camps of northern Maine.

Although to change these conditions is hard work and means the expenditure of much money on the part of the business concerns operating in this region, as well as for the Health Department of Maine, yet the return in economic, moral and physical improvement will more than justify this effort.

In these camps, where thousands of men come from all parts of New England, and particularly Boston, there are usually no hospital facilities provided, no physician is in attendance, the food is poor, housing conditions are wretched, toilet facilities are lacking, and a condition is confronted that calls for speedy hygienic action.

Boston is a far cry from northern Maine but has more than a passing interest in this matter. It is a port of entry and departure by rail and steamer for all parts of New England. In its newspapers are inserted, daily, the alluring advertisements of the lumber or realty companies for men to come to work in the camps at wages that are now higher than ever before. The fare is advanced one way and once a man gets to the logging camps there is no turning back. Often the camp is located

from twenty to sixty miles through snow or ice from a railroad station and the traveling conditions are hazardous. Here at the camps the men naturally are obliged to work at least long enough to earn money to pay for their transportation, and this means both ways if their stay is only a short one.

Living under such conditions is most discouraging even to the hardened type of rover who cares not where he lays his head. Working a full day under hard and trying conditions, the bunk is the most attractive place for the lumber-jack at the end of the day's labor.

Most of the "jacks" employed in the logging camps never wash their hands or faces, and few, if any, ever take a bath. They sleep in their working clothes, and, on account of circumstances, hardly ever change their inner garments. These men are usually housed together in overcrowded conditions, without bathing facilities, and with no proper toilet accommodations. The food, oftentimes bad, is poorly served and prepared and with but little variety. Conditions such as these are most conducive to the development and dissemination of disease.

Owing to its constant rail and water communications with Maine, any contagious disease which prevails in Maine soon appears in Boston.

Boston is, therefore, directly interested in the results which will follow, both directly and indirectly, from the action taken by the Maine health authorities.

HOW STATES, COMMUNITIES, AND INDIVIDUALS CAN HELP ELIMINATE RATS AND MICE.

By requiring that all new buildings, wharves and other structures be rat proof; that existing buildings of rat-proof construction be further protected by having basement windows and drains covered with screens, gratings, etc., and that existing buildings that are not rat proof be made so by remodeling.

By constructing sewers and drains so that they will not provide entrance and retreat for rats.

By insisting on greater cleanliness about markets, stores, and generally throughout cities, villages, and the country districts.

By threshing and marketing grain early so that stacks will not furnish harboring places and food for rats.

By removing piles of straw, trash and lumber which harbor rats in fields and vacant lots. By protecting the hawks, owls and other natural enemies of rats which are not so destructive to poultry as rats themselves.

By keeping well-trained rat dogs on farms and about city warehouses.

By keeping provisions which rats and mice will attack in rat-proof and mouse-proof containers.

By destroying rats and mice systematically by poisoning, trapping and by organized systematic hunts.

By arousing public opinion to the realization of the importance of exterminating rats and mice.

SAVE FAT.

Fat trimmings should be saved and used. Suet possesses a fat equal to lard, and when tried out under proper conditions may be used for frying operations, for shortening and in other ways in place of lard. Abroad this fat is always rendered, and in some countries suet and lard are used interchangeably for frying and shortening. Suet may be tried out by this simple method: The skin and lean parts should be removed from the fat and then cut into small pieces. Cover with cold water and place in a saucepan. Heat on the stove with the dish uncovered, so that the steam may remove any disagreeable flavor. After most of the water has evaporated, set the kettle on the back of the stove and allow the fat to slowly try out. When bubbling has ceased and the scraps are shriveled, allow the scraps to settle at the bottom of the pan. Strain through a cloth and cool.

HEALTH NOTES.

A small mosquito is a dangerous thing.

Typhoid fever is contracted by swallowing sewage.

During the winter season flood your home with plenty of fresh air and sunshine.

The full pay envelope is the great enemy of tuberculosis.

Exercise in the open air cures and prevents many ills.

Efficiency decreases as fatigue increases.

Disease prevention is sure and cheap.

REPORT OF THE HEALTH UNIT FOR THE MONTH OF NOVEMBER, 1917.

Health Department.

Visits made by n	nedica	al in	spect	or:						
Contagious.										57
Tuberculosis										2
Ophthalmia										11
Miscellaneous										29
Total .										99
Cases visited by	nurse	es:								
Medical .					٠.					232
Babies							•,			311
Total .										543
Defective sanitar	v con	diti	ons fo	ound	in t	enen	nent	hous	ses.	10
Calls by district	-									143
Instruc	tive	Dist	rict	Nur	sino	Ass	ocia	tion		
Visits made by n					_					624
	Baby	, Н у	gien	e As	soci	atio	n.			
Total number of	babie	es ca	red fe	or						169
New babies admi										23
Conferences held										3
Total conference	atter	ndan	cė							4
Home visits by n										312
Babies readmitte										
Associate	d an	d H	ebrev	v F	eder	ated	Cha	ariti	es.	
Cases investigate										5
Const	ımpt	ives	' Ho	spit	al D	epai	rtme	ent.		
Calls by nurses in	_					_				765

SUMMARY OF VITAL STATISTICS.

There were 891 deaths reported in the four weeks ending December 1, against 950 in the corresponding period last year, a death rate of 15.07 against 16.28.

Reported deaths of nonresidents numbered 131, against 158 last year.

Of deaths from reportable diseases the principal decreases were:

Anterior poliomyelitis .							13
The principal increas	es w	ere:					
Diphtheria							8
Measles							4
Pulmonary tuberculosis							33
Other important differences:	erenc	es w	ere:				
Accidental and violent .							67
Other causes							44
The principal increas	ses w	ere:					
Puerperal diseases							5
Diarrhea and enteritis (u							7
Heart disease and nephri	itis.						19

There were 13 less deaths under 1 year, 14 less under 5 years, and 4 less over 60 years.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

(Four Weeks Ending December 1, 1917.)

	Tomer	Cama	Tomar	DEATHS.		Nonres	SIDENTS	
	TOTAL	CASES.	TOTAL	L/EATHS.		SES.	DEATHS.	
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.
Diphtheria	452	141	24	16	66	40	9	8
Scarlet fever	129	85	2		17	24		
Measles	252	48	6	2				
Typhoid fever	14	12	2	2	1	1		
Whooping cough	144	30	5	3				1
Tuberculosis	229	164	99 66		18	25	15	8

MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916.

										1917.	1916.
Total	deaths									891	950
Nonre	sidents									131	158
Rate										15.07	16.28
Corre	cted rat	е	(nonres	ide	nts	deducte	ed)			12.86	13.61
Death	s under	1	year							122	135
Death	s under	2	years							154	168
Death	s under	5	years							174	188
	s over 6									283	287

	CA	USES	OE	DE	тн				
								1917	. 1916.
Anterior poliomyelitis	•							-	- 13
Cerebro-spinal meningit	is							2	1
Diphtheria								24	16
Malaria								-	-
Measles								6	_
								2	_
Tetanus								_	
Tuberculosis (pulmonar	у) .							99	66
Tuberculosis (other form	ns).							10	
Typhoid fever				:				2	-
Whooping cough								5	3
Septic sore throat . Accidental and violent								-	1
								49	116
Heart disease, endocard						itis		185	166
Pellagra Bronchitis									2
Bronchitis								5	1.0
Cancer								68	64
Diarrhea and enteritis (unde	er 2 yea	rs)					24	17
Diarrhea and enteritis (2								3	5
Erysipelas								-	2
Meningitis and encephal	litis							2	3
Old age								_	2
								115	117
Premature birth								26	29
Puerperal diseases .								11	6
Rheumatism								2	
Influenza								1	
Other causes					٠			250	294
The Following is a									
Different Divis	ion	s in t	he	Dep	artn	nent	fo	rthe	Four
Weeks Ending	De	cemb	er l	1, 19	017.				
	CEN	TRAL	DI	/ICI	ONI				
Prosecutions authorized				V 151	JIN.				. 4
Stable hearings				•	•	•	٠		. 2
Temporary stable permit						•	•		
Promises ordered vegetor	J J		•		•	٠		٠	. 1
Premises ordered vacated Miscellaneous orders	1		•	•		٠	•	•	. 9
Applications lying-in hos	· nital	la annu		•	•	٠	•	٠	4
		is appro	veu	•	•	•	•	•	
Forcible removal ordered			•			•	•	•	. 1
	•					•	•	•	. 1
Appointments						•	•	•	. 2
					•		•	•	. 2
Leaves of absence grante	u		•			•	•		. 3
	Lic	enses -	– Pe	rmit	s.				
Transfer									. 1
Hearings			•						. 1
illumings						•	•	•	. 0

Grease (licenses to remove rene						•		
								. 72
Licenses to peddle fruit and veg Manicure — Massage Hen permits Numbers assigned	getable	3						. 14
Manicure — Massage								. 10
Hen permits								. 78
Numbers assigned								. 29
Stable permit granted (provision	nal)							. 1
Stable permits granted								. 3
Numbers assigned Stable permit granted (provision Stable permits granted Stable licenses issued								. 3
Sundry licenses								. 3
Dump permits								. 4
Dump permits	es app	roved	l					. 20
Vehicles inspected and approved	d .							. 545
								. 3
								. 1
Offensive trades licensed								0
MEDIO	CAL I	DIVIS	SION	J.				
Commu	nicab	le Di	seas	es.				
Number of visits by medical ins	nector	q						. 889
Antitoxin given	pootor		•					. 30
Antitoxin given Deaths investigated	٠	•	•			•	,	. 10
Cases brought to Boston for tre	atment	t.	•			•		. 115
Vaccinations	aumen	U	•		•	•		. 14
Vaccination certificates	•	•	•		•	•		
Cases brought to Boston for tre Vaccinations Vaccination certificates Antityphoid vaccine administer	od .	•	•					0
Forcible removals recommended	l .	•	•	•				
Forcible removals recommended		•	•	•			•	·
Public	Healt	h Nı	ırsir	ıg.				
Communicable disease visits .								. 883
		•						
Number of revisits (infants) . Number of new babies visited		•		•				3,834
Number of new dables visited	•		. •	•				. 462
Total visits by nurses .								5,179
, and the second								,
BACTERIOLO	GICAL	. LA	BOF	RAT(ORY	•		
Examinations fo	r Dia	gnosi	s ar	nd R	elea	se.		
Diphtheria								2,460
Tuberculosis								
Typhoid								73
								439
Gonorrhea								561
T. B. Comp. Fix. Test (special e	vamin	ation	a)					
Other examinations *	ланин	a titoii	5)					177
Bacteriological mills examination			•					
Bacteriological milk examination Bacteriological ice cream examin	as .	•						4.0
Restoriological water examination	ations							
Bacteriological water examination	112							

^{*}Examination of rats, 114; Genito-Urinary Tuberculosis, 2; Ophthalmia, 44; Malaria, 1; Vincent's Angina, 1: Spirocheate Pallida, 1; Paratyphoid, 6; Rabies, 4; Anthrax, 2; Glands for T. B.; 1.

FOOD INSPECTION.

Live Stock Inspected	at Brighton	Abattoir.	
			. 2,004
Cattle inspected			. 1,554
Sheep inspected			. 3
Swine inspected			. 1,056
Animals condemned, whole			. 14
Parts condemned			. 635
Stores inspected			. 803
Court case			. 1
Fines			. \$300
2 1100			
MILK IN	SPECTION.		
(Examinations as to S	Statute Requir	rements.)	
Samples examined:		,	
Chemical examinations of milk .			. 1,220
Bacteriological examinations of mi			. 654
Chemical examinations of vinegar			. 136
Chemical examinations of butter a			. 63
Chemical examinations of ice creations			. 14
Number of court cases			. 28
Fines			. \$235
Inspection of Provision	a Amtialas C	andammad	
*	Meat and Fisl		
Meat and Fish:			~ 1
Pork $17\frac{1}{2}$ pounds			5 pounds
Turkey 161 pounds	Sausages	2	½ pounds
Duck $18\frac{1}{2}$ pounds	3.4.		
Chicken 15 pounds	Miscellaneous Nuts		0 1
	Nuts .	6,71	0 pounds
	Grapes .		5 pounds
Poultry 33 pounds			0 pounds
Head cheese $2\frac{1}{2}$ pounds			0 dozen
Eggs 30 dozen	Candy .	1	7 pounds
SANITARY			
New reports			. 3,366
New tenement house reports			. 241
Legal notices recommended			. 411
Reinspections			. 6,055
Nuisances reported			. 4,263
Complaints investigated			. 849
Number of court cases			. 1
MORBIDITY AN	ID MORTALI	TV.	
	/eeks.)		
`		1917.	1916.
Total deaths		. 11,636	
Nonresident deaths		. 1,736	
Deaths under 1 year of age .		. 1,801	1,908
Pneumonia		. 1,474	
Cancer		. 838	809
Heart disease		. 1,348	1,385
Diarrhea and enteritis under 2 years		. 387	
/ 20			

DEATHS FROM COMMUNICABLE DISEASES.

(48 Weeks.)

			·				1917. Non-
					1917.	1916.	residents.
Diphtheria .					243	170	67
Scarlet fever .					42	36	14
Measles					86	107	11
Typhoid fever	٠				22	21	7
Whooping cough					40	74	. 3
Tuberculosis .		٠			1,063	1,039	102

CASES OF COMMUNICABLE DISEASES REPORTED.

			(48	Wee	ks.)			1917. Non-
						1917.	1916.	residents.
Diphtheria				2		3,599	2,200	541
Scarlet fever						1,366	1,677	2 83
Measles .						5,353	5,078	46
Typhoid fever						202	182	24
Whooping cou	ıgh					758	1,373	8
Tuberculosis						2,868	2,803	246

MONTHLY METEOROLOGICAL SUMMARY, NOVEMBER.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 30.03; highest, 30.57; date, 27; lowest, 29.47; date, 23.

TEMPERATURE.

Highest, 65; date, 18; lowest, 13; date, 27; greatest daily range, 26; date, 18; least daily range, 4; date, 21; normal for month, 41.2°.

PRECIPITATION.

Total this month, 0.59; snowfall, 2.2; greatest precipitation in 24 hours, 0.40; date, 22; snow on the ground at end of month, normal for this month, T.

WIND.

Prevailing direction, northwest; total movement, 7,836 miles; average hourly velocity, 10.9; maximum velocity (for five minutes), 23 miles per hour from west, on 26th.

WEATHER.

Number of days clear, 16; partly cloudy, 7; cloudy, 7; on which .01 inch or more of precipitation occurred, 3.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 11; lunar, 27; hail, 0; sleet, 3.23; fog, 0; thunderstorm, 0; frost: light, 0; heavy, 1, 2, 3, 4; killing, 5.

(265)





TO SOLDIERS OF THE NATIONAL ARMY.

You are undertaking a great duty. The heart of the whole country is with you. Everything that you do will be watched with the deepest interest and with the deepest solicitude, not only by those who are near and dear to you, but by the whole nation besides. For this great war draws us all together, makes us all comrades and brothers, as all true Americans felt them=selves to be when we first made good our national independence. The eyes of all the world will be upon you, because you are in some special sense the soldiers of freedom.

Let it be your pride, therefore, to show all men everywhere not only what good soldiers you are, but also what good men you are, keeping yourselves fit and straight in everything, and pure and clean through and through. Let us set for ourselves a standard so high that it will be a glory to live up to it, and then let us live up to it and add a new laurel to the crown of America. My affectionate confidence goes with you in every battle and every test. God keep and guide you!

- Woodrow Wilson.

MONTHLY BULLETIN

HEALTH DEPARTMENT

OF THE

CITY OF BOSTON



FRANCIS X. MAHONEY, M. D., Commissioner

STATISTICS FOR 1917.

				P	opt	ılati	on				. 77	2,3	70				
Births	a						19,	800	В	irth	rate	. '		۰			25.7
Deaths				۰			12,	721	I	eath	rate	٠					16.34
	Of	th	ese	to	tal	des	ths	15	per	cent	were	n	onr	esid	lent	S.	

BOSTON
HEALTH DEPARTMENT
CITY HALL ANNEX
1018

HEALTH DEPARTMENT.

(Tel. Fort Hill 5100.)

Commissioner of Health.

Jillillissioner	or ricai	CIII						
Secretary	,							1109 City Hall Annex.
Publications								1109 City Hall Annex.
Licenses								1109 City Hall Annex.
Medical Divi	sion							1107 City Hall Annex.
Communica								1107 City Hall Annex.
Child Hygie	ene .							1108 City Hall Annex.
Health Uni								17 Blossom street.
Vaccination	Station	•	•		•	•		17 Blossom street.
Detention I								Southampton street.
Occupation								17 Blossom street
Occupation	ai Cillie	۰	•	•	•	•	٠	17 Diossom street.
Bacteriologic	cal Labor	rato	ry					1101 City Hall Annex.
Examinatio	n of Cult	ures						1101 City Hall Annex.
Wasserman	n Tests							1101 City Hall Annex.
Food Inspec	tion Div	ision	3					1110 City Hall Annex.
Inspection								1110 City Hall Annex.
Examinatio								1104 City Hall Annex.
Inspection								1102 City Hall Annex.
							* 1	
Brighton A	battoir	•		•	•	•	٠	Market street, Brighton
Sanitary Ins	spection	Divi	sion					1111 City Hall Annex.
Abatement	of Nuisa	nces						1111 City Hall Annex.
Examinatio								1111 City Hall Annex.
Vital Statist								1112 City Hall Annex.
Permits for	Burial							1112 City Hall Annex.
								OW 37 43 G
Superintend	ent of P	'eddl	ers					27 North Grove street.

OFFICE HOURS.

The Health Department will be open from 9 a. m. to 10 p. m., except Saturdays, when the hours will be from 9 a. m. to 1 p. m. and from 5 p. m. to 10 p. m. Sundays and holidays, from 10 a. m. to 12 m. and from 5 p. m. to 10 p. m., for the reporting of cases of communicable diseases, issuing of burial permits, the distribution of antitoxins and vaccines, and the receiving of cultures and widals.

FREE WASSERMANN TESTS.

The Bacteriological Laboratory is prepared to examine blood specimens by the Wassermann test for syphilis, free of expense. Tests are made each Tuesday, Wednesday, Thursday and Friday. Blood is drawn from patients in the laboratory each Monday, Tuesday, Wednesday and Thursday from 2 to 4 p. m.

MONTHLY BULLETIN

OF THE

HEALTH DEPARTMENT OF THE CITY OF BOSTON.

Francis X. Mahoney, M. D., Commissioner of Health.

All communications relating to this publication should be addressed to Editor, Bulletin of the Health Department, Boston.

VOL. 6.

BOSTON, DECEMBER, 1917.

No. 12

Infant Saving is Nation Saving.

GREETING.

The Health Commissioner, as the official intrusted by the City of Boston with the responsibility for the physical welfare of its citizens, through preventive measures, wishes to take this opportunity, at the close of the year, to thank all those who have, in a measure, be it large or small, contributed toward the excellent results which have accrued in health work the past year.

MORTALITY AND MORBIDITY STATISTICS, 1917.

The records of the Boston Health Department for the year 1917, just closed, show that 12,721 deaths occurred against 12,769 for the year 1916. The number of nonresident deaths, which are increasing annually, were 1,859 against 1,797 for 1916, and comprise 15 per cent of the total number of deaths recorded. The death rate for the year 1917 is 16.47 as against 16.79 in 1916, and is one of the lowest rates ever recorded in this city. Deducting the nonresident deaths, the corrected rate is 14.06 against 14.43 in 1916.

The deaths of children under one year numbered 1,965 against 2,055 in 1916, and the births recorded to date 19,800, giving the low death rate of 99.1 per 1,000 births. The rate in 1916 was 104.6, and back in 1872, when infant mortality statistics were first compiled in Boston, the rate was 230. This is the year first in the history of Boston when the number of deaths of infants under one year of age is under 100 per 1,000 births. Moreover, of this number there were 385 nonresident

babies, comprising 20 per cent of the total, brought to Boston for treatment. Deducting this number of nonresident deaths of infants, the corrected rate is 79.7 per 1,000 births.

Although Boston in 1916 led the large American cities as regards the low rate for typhoid fever, this year, 1917, a further decrease is noted, there being 22 deaths from this disease as against 26 in 1916, giving a death rate of .28 per 10,000 of population as against .34 in 1916. Of this number five were nonresidents and deducting these would lower the rate to .22 per 10,000 population.

The following figures are the death rates of the other communicable diseases as compared with 1916 (per 10,000 population):

						1917.	1916.
Whooping cough						. 57	.97
Typhoid fever						.28	.34
Diphtheria .						 3.57	2.43
Scarlet fever .						.60	.51
Pulmonary tubero	eulo	sis				 14.95	14.62
All forms tubercu	losi	S .				17.08	17.33
Measles						1.31	1.41

The figures on page 273 will give the number of deaths from the principal causes for the year 1917 as compared with 1916 and also the number of nonresidents in these causes for the year 1917.

The figures for the year 1917 show not only a lower death rate, but an actual decrease in the total number of deaths over the previous year. This is a most interesting and encouraging sign.

The typhoid fever figures are gratifying insofar that in 1916 Boston led in this respect all large American cities and it is hoped that with this further decrease it will hold its place in the forefront of progress in matters of health, inasmuch as typhoid fever rate is the best index of the sanitary condition of a city and the endeavors of its health officials.

Pulmonary tuberculosis shows a slight increase, but on the other hand all forms of tuberculosis show a decrease. Much time and endeavor has been spent in tuberculosis work. Constant supervision is kept over each case and to our knowledge there is not in Boston a neglected case of tuberculosis that is in need of hospital treatment. Regular visits are made to each case by nurses and physicians of the city departments with view to the promotion of the welfare of the patients and the protection of their families.

SOME OF THE PRINCIPAL CAUSES OF DEATH FOR 1916 AND 1917, WITH NONRESIDENTS.

	1916.	1917.	Non- Residents.
Anterior poliomyelitis	168	4	3
Cerebro-spinal meningitis	45	54	13
Diphtheria	185	276	72
Measles	107	101	13
Scarlet fever	39	46	14
Tuberculosis (pulmonary and laryngeal)	1,112	1,155	105
Other tubercular	206	164	50
Typhoid fever	26	22	5
Whooping cough	75	44	3
Alcoholism	162	163	26
Diabetes	192	148	21
Appendicitis	107	128	28
Bronchitis	119	108	5
Cancer	868	916	176
Broncho-pneumonia	619	505	34
Pneumonia	1,012	1,096	91
Influenza	80	51	
Syphilis	72	87	14
Diarrhea and enteritis (under 2 years)	356	406	91
Diarrhea and enteritis (2 years and over)	63	98	17
Old age	18	35	
Premature birth	399	371	63
Puerperal diseases	130	173	39
Arteriosclerosis	283	401	33
Cerebral hemorrhage and softening	567	710	56
Bright's disease	888	787	76
Heart disease	1,688	1,603	122
Suicides	124	134	29
Homicides	30	27	6
Illuminating gas poisoning.	54	59	3
Accidental drowning	58	55	19
Traumatism by fall	200	222	45
Elevator accidents	11	24	5
Electric railway accidents	72	26	7
Motor vehicles	73	82	15
Steam railroads	64	. 40	16
Teams	30	19	3

Diphtheria shows an increase and it might be said that during the past year this disease has been unusually prevalent, not only throughout the state, but all over the country. The department has during the year urged physicians to use antitoxin immediately upon diagnosis and to be on the watch for "carriers," so dangerous in a community in the spread of this disease. Anti-toxin is provided free of charge and hospital facilities are provided for all patients who cannot be properly treated at home.

Whooping cough shows a decrease over 1916 and with the opening of the new ward by the City Hospital of Boston, the first of its kind in the country, additional improvement is looked for in 1918.

Scarlet fever shows a slightly higher rate and measles lower than in 1916.

During the year 1917 there were but four deaths from infantile paralysis, and three of these were nonresidents, against 168 in 1916.

Pneumonia continues to exact its toll in increasing numbers. Broncho-pneumonia and lobar pneumonia combined show an increase of thirty deaths over 1916, the figures being 1,601 and 1,631. Pneumonia is unusually prevalent all over the country, and even in the military camps of the Government. Modern methods of serum treatment for this disease, which are about to be introduced, may be of great assistance to health officers all over the country in combating pneumonia.

The decrease in the number of deaths of infants under one year of age and the correspondingly low death rate is especially gratifying. It is due to the coöperation of the many charitable and philanthropic associations, organizations, clubs, etc., that are working with the Health Department in this great campaign for baby saving that has been carried on for several years past. The interest that has been awakened among the mothers and the physicians by all agencies that have so earnestly and generously worked towards this great and common end has been productive of results. Education, advice, literature, instruction, teaching and the public press have all played a great part in this work, and all who have worked for baby saving are to be congratulated for the wonderful showing of 1917, a goal that has long been our aim.

This work has not been without its handicaps, such as the extreme periods of heat last summer, the high and increasing cost of foodstuffs, particularly milk, the babies' food, clothing and fuel, and the cold of the early winter. These obstacles

that have been placed in the path of baby progress have happily been overcome. It is not sufficient that this work should stop here, but the good results should act as a stimulus to strive for even better figures for the coming year. This work will be difficult in view of industrial and economic conditions all over the country, but every effort is worth making when we know the reward is the saving of an infant's life.

Cases of Communicable Diseases Reported During 1917.

			3.
Measles		. 5,698	5
Diphtheria		. 4,098	3
Tuberculosis		. 2,796	3
Scarlet fever		. 1,49	7
Chicken-pox	٠,	. 1,823	3
Whooping cough		. 931	1
Ophthalmia		. 1,124	1
Mumps		. 1,704	£
Lobar pneumonia *		. 422	2
Poliomyelitis		. 28	3
Typhoid fever		. 201	1
Erysipelas		. 170)
Dysentery	e ^c	82	2
Septic sore throat		. 56	3
Trachoma		. 86	3
Cerebro-spinal meningitis		. 67	7
Malaria		. 26	5
Tonsilitis		. 27	7
Dog-bite		. 8	3
Pellagra		. 8	3
Anthrax		. 19)
Leprosy		. 1	1
Variola		. 5	5
Tetanus		. 2	2
Trichinosis		. 2	2
Hookworm		. 1	
Actinomycosis		. 1	

^{*} Disease made reportable May 1, 1917.

ARE YOU REPORTING PNEUMONIA?

Under the laws of the State of Massachusetts a physician who fails to report a case of lobar pneumonia to the local health authorities is liable to a fine of "not less than fifty nor more than two hundred dollars."

The statute* relating to this matter reads as follows:

If a physician knows that a person whom he is called on to visit is infected with smallpox, diphtheria, scarlet fever or any other disease declared by the state board of health† to be dangerous to the public health,

^{*} Section 50, Revised Laws, as amended by 1905, 251, Sect. 2, and by 1907, 480.

[†] Now State Department of Health.

or if one or both eyes of an infant whom or whose mother he is called to visit become inflamed, swollen and red and show an unnatural discharge within two weeks after the birth of such infant he shall immediately give notice thereof in writing over his own signature to the selectmen or board of health of the town; and if he refuses or neglects to give such notice, he shall forfeit not less than fifty nor more than two hundred dollars for each offence.

A list of the diseases which have been declared by the State Department of Health to be "dangerous to the public health" is printed on the postal cards distributed by the Boston Health Department to physicians to facilitate the reporting of such diseases as required by law. Following the lead of over a dozen of the more progressive states of the Union in health matters, lobar pneumonia was made a reportable disease in Massachusetts in May 1, 1917. The extent, however, to which Boston physicians are rendering themselves liable to the penalty above mentioned is indicated by the fact that whereas only 91 cases of pneumonia were reported to the Boston Health Department in December, this disease appeared as a cause of death in 49 death certificates.

Lobar pneumonia is killing about one thousand persons annually in Boston, standing next to tuberculosis as a cause of mortality. Like tuberculosis, to a great extent, it finds its victims among persons at an age when they should be at their greatest productive activity. Like pulmonary tuberculosis, lobar pneumonia is a contagious disease, but its ravages have hitherto been regarded both by the public and the medical profession with the same sort of fatalistic resignation with which deaths from pulmonary tuberculosis were regarded fifty years ago. A considerable number of states have formally declared lobar pneumonia to be "a disease dangerous to public health" and have made it reportable to local health authorities as a step in the direction of its control. There is as yet a lack of agreement as to what the next step should be. It is not improbable that the matter will be determined by experience gained in the military camps in this war where wholesale evidence of the contagiousness of lobar pneumonia not only makes it necessary to do something in an effort to control the disease but gives opportunity to judge of the relative value of measures which may be adopted for this purpose. But even with our present knowledge of the disease and notwithstanding the fact that it differs radically from tuberculosis in certain important particulars, we can safely say that the same measures that the public has been taught to observe to prevent pulmonary tuberculosis will tend to prevent lobar pneumonia as well.

MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH.

The annual business meeting and election of officers of the association will be held at the Victoria Hotel, near Copley square, Boston, Mass., Thursday, January 31, 1918. Luncheon will be served promptly at 1.30 p. m. Tickets, \$1.50.

Program.

Paper, "Résumé of Smallpox Cases in Worcester in 1917," by Dr. Edward H. Trowbridge, Chairman Worcester Board of Health.

Address by Hon. Calvin Coolidge, Lieutenant Governor of Massachusetts.

Meeting of the Executive Committee at 1 p. m.

THE OUTPOST TONSILS.

The tonsils are the sentinel outposts of the human system. They are by no means designed to repel an overwhelming attack of the enemy germs upon the physiological structure which they protect, but they are intended, temporarily at least, to resist the foe's advance guard, and to sound the alarm permitting reinforcements to be brought forward and avoiding complete rout. Real knowledge of the frequent local origin of many constitutional diseases thus suggests that treatment in the acute tonsillar affections should be prompt and energetic. As a large proportion of these ailments occur in children and quickly assume a most dangerous character, there should be no temporizing, but a quick decision in diagnosis and the institution of prompt remedial measures. By adopting an attitude of suspicion in every case of tonsillar trouble in children, many lives may be saved that are sacrificed to delay, for the element of time is of the greatest import. In twentyfour hours a suspicious looking throat may exhibit the full blown type of malignant disease.

Preventive treatment in these cases concerns education of the mother in regard to securing prompt aid in every case of even apparently slight indisposition. Another very important point in dealing with tonsillar trouble is the matter of safeguarding against general infection and the avoidance of a long drawn out struggle with rheumatic fever and its complications. It is often difficult to impress the patient with the necessary means of safety in this direction. We recall a six months' invalidism which a sufferer from an attack of acute follicular tonsillitis brought upon herself by disregarding an absolute order to avoid exposure during convalescence because her Christmas shopping had to be attended to. The attack of acute articular rheumatism which ensued made her careful to obey orders ever afterwards. — New York Medical Journal.

BOOKS AND DISEASE.

There is still firmly fixed in the public mind the erroneous notion that inanimate objects are the main cause of the spread of disease.

The borrowed book is a bugaboo of this sort. The danger of infection from books has undoubtedly been exaggerated, so difficult is it to find authentic instances of disease from this source, that many students of health matters incline to the view that books play little part in the spread of infection. The fact is, as all our experiments prove, that it is the mild or unrecognized cases which are the chief means by which communicable diseases are spread.

At the same time, it is advisable that all possible precautions be taken. No precautions are necessary in the case of books that have only been in the room where sickness is present, and have not been handled by the sick person.

With books that have been handled or soiled by the sick person the simplest and safest procedure is to destroy them. If the books are of value, however, this is not necessary, for they may be disinfected. This is done by exposure of the books in a formalin chamber or to sunlight. Of course this disinfects only the outside of the books. Experiments show that diphtheritic and other hardy organisms will live in the closed book for varying periods, although ultimately all die. In most instances they die in a short time but may persist for a period as long as three months. Therefore, the scientifically correct treatment of books would require that they be set apart and not used for a period of about ninety days. In this way valuable books may be saved.

Give your rooms at home a thorough bath of fresh air frequently during the day; clear the atmosphere and you will feel better, eat heartier, sleep sounder, and be well equipped for the day's work ahead.

DIET AND HEALTH.

The average family in Boston has already felt obliged to make changes in its diet and is facing the prospect of further changes in order to adjust the family food bill to the family income. There are other factors besides an individual's diet which may determine his health and economic efficiency, but a person cannot do a square day's work, maintain himself in condition to resist disease and raise a healthy family without a diet suitable for this climate with respect to quantity, quality and variety. From various sources a good deal of advice is being supplied as to ways of economizing in the cost of feeding a family, but some advice given in this connection is of such a character that it would not seem amiss to call attention to certain facts which cannot be ignored without risk to health. It has been figured out with a showing of mathematical accuracy that the human body needs daily certain amounts of well recognized chemicals or chemical compounds which it is customary to express in connection with estimates of the theoretical heat producing capacity of various articles of food or calories. Valuable as this information is it does not tell the whole story. The nutritive value of any food may be destroyed by improper preparation or in other words by bad cooking. The capacity of the human body to utilize foodstuff of undoubted nutritive value varies with the age and health of the individual and may also differ greatly among different individuals. The saying "what is one man's meat is another's poison" is entirely true. Individuals also differ in their capacity to adapt themselves to and properly utilize unaccustomed articles of food. A monotonous diet is to be avoided not only because it may be deficient in elements necessary to bodily nutrition, but because a continued excess of a certain kind of food may finally produce such an effect on the body as to act as an actual poison. Then too even on theoretical grounds it has been found necessary to admit that the possible nutritive value of articles of food cannot be estimated by their known chemical composition, but is also dependent upon the relative amount they may contain of certain intangible substances to which the name "vitamines" has been given.

Certain results of a defective diet have long been recognized as for example, the diseases known as scurvy and rickets. Beriberi which has figured so conspicuously as a cause of mortality in the far East and which was formerly considered a contagious disease was demonstrated a few years ago to be due to a deficiency in the habitual diet of its victims of something essential to proper nutrition. The discovery was made in connection with sufferers whose diet had consisted almost exclusively of polished rice, and if not too far gone it was found they would recover if put on a varied diet or even on a diet of whole rice, that is, rice from which the outer covering of the grain had not been wholly removed. Beriberi may be produced by any long continued diet lacking in the same nutritive elements that polished rice lacks. It occurs among sailors who have lived too long on a monotonous diet of canned and preserved food. It can be produced in chickens in about six weeks by feeding them exclusively on the best white bread and disappears when their diet is varied even to the extent of feeding them the whole wheat. More recently pellagra has been placed in the class of diseases caused by an ill-balanced diet. This disease which is characterized first by digestive disturbances and changes in the skin and later by marked nervous symptoms and even insanity was comparatively rare in this country up to a few years ago.

In 1915 it was recognized as the cause of about 1,200 deaths in South Carolina alone. Some are still unwilling to admit that pellagra is due entirely to an ill-balanced diet but all admit that it can both be prevented and, if not too late, cured by a proper variety of food. It is a matter of special interest also that the rapid increase in cases of pellagra in this country has been coincident with increasing cost of the kind of food that has been found to be able to prevent and to cure the disease, and has occurred chiefly in the South and among a class of people who have been changing their habits of life and character of their diet. The examples just cited are those of definitely recognized disease but less clearly marked instances of ill-health and of faulty development of children are likewise to be attributed to a diet perhaps abundant in quantity but deficient in elements demanded for the proper nutrition of the individual.

It is undoubtedly true that the customary diet of the average Boston family could be changed to advantage and even at present food prices it is quite possible that such a family might be fed at no greater cost than formerly and made healthier and stronger by giving more careful attention to the purchasing, selection, variety and cooking of the family food supply, but in trying to accomplish this desirable result the following general considerations should be kept in sight.

The staple articles of food which possess the greatest nutritive value and come the nearest to supplying all bodily needs will be found to be the most expensive. Such articles, therefore, will be the first on which a family will tend to economize. While the amount of these articles in the habitual diet of many families might be cut down even in the interest of health this is by no means true of all families and it is safer to restrict such articles in amount or in frequency in the diet rather than to try to cut them out altogether.

In any effort to lessen the cost of the food supply by buying cheaper articles of food the diet should be increased in variety and never diminished. It is upon such a variety that we must depend to provide the body with all the different food elements that it needs and there is evidence to indicate that this variety should include a certain amount of uncooked fruit.

It is important that a varied diet should not only be provided but eaten. People do not take kindly to changes in their habitual diet. To save the Malay from beriberi it has been found necessary to tax polished rice in order to make it too expensive for constant use. Our own people will riot over the high price of potatoes when cheaper wholesome substitutes therefor might be obtained. In this connection it is also to be remembered that cheaper articles of food will require greater attention to their preparation in order to make them palatable and wholesome and this means that the successful modification of the accustomed diet of the average family involves greater attention to cooking.

VACCINATION EXEMPTION CERTIFICATES.

The Medical Director of Schools has issued the following letter concerning the evasion of vaccination to all school physicians under his charge:

[Circular No. 15.]

THE SCHOOL COMMITTEE OF THE CITY OF BOSTON,
DEPARTMENT OF MEDICAL INSPECTION,
MASON STREET, January 10, 1918.

To the School Physicians:

"A child who has not been vaccinated shall not be admitted to a public school except upon presentation of a certificate granted for cause stated therein, signed by a regular practising physician, that he is not a fit subject for vaccination."— Extract from Acts of 1907, chapter 215.

The attention of this office has been directed to the fact that exemption certificates are issued without proper examination of the child; that they are vague and indefinite, issued for the purpose of evading this law.

The State Board of Registration in Medicine is willing to coöperate in the prevention of this abuse.

A school physician who has reason to believe that certificates are given without proper examination and to evade the law should notify the Director of Medical Inspection who will bring the case to the attention of the proper authorities.

It is important at all times to rigidly enforce this law; it is especially so at a time when the community is menaced by a probable visitation of smallpox.

Very truly yours,

William H. Devine, M. D.,

Director of Medical Inspection.

HORSE MEAT TRADE IN NEW YORK CITY.

Five shops for the exclusive sale of horse meat have been opened in New York City. Because the animals are inspected thoroughly by the City Health Board both before and after killing, and because horse flesh is cheaper than other meat, enabling certain classes of Swiss, Italians and Germans to eat meat oftener than they could otherwise afford, the retailers have disposed readily of all this meat they could obtain. On the windows and inside these shops must appear signs stating "Horse Flesh Sold Here," and hotels and restaurants are not allowed to use this meat unless the words "Horse Flesh is Being Used" are printed clearly on the menus. Horses slaughtered for human consumption must pass an inspection more complete than that for cattle. Horses of little value as work horses because of injuries to the feet or legs are bought at low prices at the various sales in the city and slaughtered at one slaughter house, where under the supervision and inspection of the City Board of Health all the killing for the five shops is done. Animals failing to pass the ante-mortem tests are rejected for food purposes or tagged and slaughtered under special precautions. Post-mortem tests are made and meat which does not pass those tests may not be used for food. The whole carcasses are sold by the slaughterers to the retailers and dress from 48 to 65 per cent. The offal is not utilized except for tankage because of lack of equipment at the slaughter house. The comb fat and the caul fat are rendered and sold at 20 cents a pound. The hides bring about \$7 each, and the bones 75 cents per hundredweight. The forequarters are usually boned out and made into bologna by the retailers as there is little demand for chucks and plates in the absence of a Jewish market. Other products are hearts, pickled tongues, head cheese, liverwurst and small bologna. Ribs and hindquarters are cut up into retail cuts similar to retail beef cuts, as horse

meat competes chiefly with the cheaper grades of beef. A comparison of the prices of horse meat and common beef in New York City on December 18, is interesting.

	RETAIL PRICES.		
	Horse Meat (Pound).	Common Beef (Pound).	
Ribs	\$0 12	\$0 20	
Ribs, bone out	14	′27	
Navel and plates	08	16	
Round	14	30	
Loin steak	14	30	
Soft bologna	14	22	

SUPREME COURT DECISION.

The Supreme Court of this state recently rendered a decision favorable to the Government in the case of Commonwealth v. Titcomb. This was a complaint made by the Boston Health Department through the agency of the Milk Bureau, and charged the defendant with possession with intent to sell of milk not of good standard quality. The defendant was not a producer of milk, and contended that the milk law was unconstitutional, as it did not allow him any time to bring his milk up to standard quality, as is the case with milk producers in accordance with Revised Laws, chapter 56, section 62. According to this section producers of milk are allowed twenty days to bring their milk up to the legal standard, after the taking of a sample which fails to conform to the requirements of the law for milk solids and fat. After the twenty day period. if the producer's milk is still below the legal standard, prosecution may be made.

In discussing this contention of the defendant, the Court said in part:

This statute is assailed as being arbitrarily discriminatory in favor of the producer of milk against the seller who is not a producer, and as making an unfair and unreasonable classification, and as being violative of rights secured by the Constitution of the United States. So far as the federal constitution is concerned, these contentions of the defendant seem to us to be disposed of adversely by the decision of St. John v. New York, 201 U. S. 633. In the statute of New York thereunder consideration it was said:

If we could look no farther than the mere act of selling, the injustice of the law might be demonstrated, but something more must be considered. Not only the final purpose of the law must be considered, but the means of its administration—the ways it may be defeated. Legislation to be practical and efficient must regard this special purpose as well as the ultimate purpose. The ultimate purpose is that wholesome milk shall reach the consumer, and it is the conception of the law that milk below a certain strength is not wholesome, but a difference is made between milk naturally deficient and milk made so by dilution. It is not for us to say that this is not a proper difference, and regarding it the law fixes its standard by milk in the condition that it comes from the herd. It is certain that if milk starts pure from the producer it will reach the consumer pure, if not tampered with on the way. To prevent such tampering the law is framed and its penalties adjusted. As the standard established can be proved in the hands of a producing vendor, he is exempt from the penalty; as it cannot certainly be proved in the hands of other vendors so as to prevent evasions of the law, such vendors are not exempt. In the one case the source of milk can be known and the tests of the statute applied; in the other case this would be impossible, except in few instances.

The statute is not in contravention of any provision of the Constitution of this Commonwealth. The statute is designed to protect and promote the public health. Under present conditions of life milk is an essential article of food in almost universal use. Any statute rationally adapted to the end of securing its purity, preserving unimpaired its natural qualities, and securing it from adulteration, plainly is within the power of the Legislature. It was said in Commonwealth v. Graustein & Co., 209 Massachusetts, 38, 42, that "The history of milk legislation in this Commonwealth shows conclusively the determination of the law-making power to protect the community from adulterated or impure milk." The intent of the vendor has been made immaterial, the main object being to shield the public from an imposition in guise of a fluid which may look like pure milk and yet be either adulterated or skimmed, an imposition difficult of detection. Necessarily there must exist a wide distinction in the selection of appropriate means. It would be comparatively simple to ascertain whether the quality of milk offered for sale by the farmer, either at his door or at wholesale or retail delivery, was that produced naturally by his herd. It would be difficult commonly to find out whether the milk offered for sale, especially in cities, by dealers who were not producers, was of the natural quality given by the cows from which it had come. This and perhaps other conditions may have been within the knowledge of the Legislature in deciding that, in order to protect the public from imposition and the consequent possibility of sickness, a classification of vendors of milk into those who were producers and those who simply were dealers was necessary or at least wise. When the statute is considered in its application to two vendors of milk selling in competition side by side, one a producer and the other a dealer who is not a producer, it has an appearance of inequality. This appearance is strengthened by the suggestion that the nonproducing seller may have bought his milk from his competitor who is also a producer. But placing the situation in its true perspective minimizes this seeming inequality and demonstrates that it may not be substantial. The ultimate aim of the statute is to secure a pure and healthful article of food of widespread use. The individual consumer ordinarily is unable to detect adulteration and is well nigh powerless to defend himself against such deception. It is not commonly discernible on a superficial inspection. These factors justify a reasonable classification. The Legislature may have found that common experience has demonstrated that impurities and adulterations are found in the vast majority of instances in milk kept for sale by nonproducing dealers and only in a comparatively insignificant and negligible number of instances in milk offered for sale by the owner of the cows from which the milk comes. It may have found also that instances of milk below the established standard offered for sale by producers arise usually from the failure of the cows to produce milk of that quality rather than from any willful act of the producer. It is, perhaps, matter of common knowledge that some breeds of cows do not give milk of the quality required by the Massachusetts standard. If that be so, it may have been thought that the farmer should be given a chance to bring the milk of his herd up to the required standard before rendering him liable to prosecution. Moreover, practical difficulties in the way of proving actual adulteration of milk in the hands of the nonproducing vendor, not existing in the case of the producing vendor, can easily be conceived to exist. These considerations and perhaps others lead to the conclusion that a classification of vendors of milk into those who are producers and those who are not cannot be said to rest upon an immaterial, unreasonable, or arbitrary distinction. The Legislature has ample power under the Constitution to enact statutes regulating conduct

based upon classifications which have some rational connection with the preservation of the public health. It may exclude some from their operation so long as such exclusion has a reasonable relation to the result to be achieved and is not a whimsical or arbitrary selection.

ANNOUNCEMENT TO PHYSICIANS, PUBLIC HEALTH AND SOCIAL WORKERS OF THE UNITED STATES AND CANADA.

The Metropolitan Life Insurance Company invites physicians, public health and social workers to make use of its valuable collection of mortality statistics.

These statistics present the principal causes of death among white and colored wage earners in the United States and Canada. The material covers over ten million individuals for each of the six years, 1911 to 1916. Death rates are available for each race, by sex and by age period.

The company hopes in this way to aid in the study of disease and disability among wage earners. It desires to stimulate medical investigation and research. By offering these statistics to the medical profession and to public health and social workers, the company expresses also its appreciation of the coöperation which it has received from physicians and others who have replied to inquiries and have given detailed information in thousands of cases. This assistance has helped to make the statistics more accurate and valuable.

All inquiries should be addressed to Statistical Bureau, Metropolitan Life Insurance Company, 1 Madison avenue, New York City.

Patronize only those motion-picture houses that are clean and well ventilated.

It is better to walk if possible to and from the office rather than ride in crowded, stuffy or poorly ventilated street cars, elevated trains or railway coaches.

REPORT OF THE HEALTH UNIT FOR THE MONTH OF DECEMBER, 1917.

Health Department.

Visits made by m	edica	lins	pect	or:						
Contagious.										30
Tuberculosis										1
Ophthalmia										2
Miscellaneous										49
Total .										82
Cases visited by r	nurses	3:								
Medical .										256
Babies								,		56
Total .										312
Defective sanitary	y con	ditio	ons f	ound	l in t	tener	nent	hous	ses,	1
Calls by district p	hysic	cian	fron	n Bo	ston	Disp	pensa	ry		184
Instruct	tive I	Dist	rict.	Nui	sing	r Ass	socia	tion	١.	
Visits made by nu										640
T	2 a by	LI.	~io=	A		atio	42			
	Baby	_	-							
Total number of										170
New babies admi							•			14
Conferences held										4
Total conference										230
Home visits by n	urses	٠				•		٠		479
Associated	d and	ı H	ebre	w F	eder	atec	l Ch	ariti	ies.	
Cases investigate	d and	lass	iste	d .						4
Consu	mpt	ives	' He	ospit	al D	epa	rtme	ent.		
Calls by nurses in	n dist	rict								750

SUMMARY OF VITAL STATISTICS.

There were 961 deaths reported in the four weeks ending December 29, against 908 in the corresponding period last year, a death rate of 16.22 against 15.57.

Reported deaths of nonresidents numbered 126, against 138 last year.

Of deaths from reportable diseases the principal decreases were:

Anterior police	mye	litis								4
The princip	al i	ncre	ases	wei	e:					
Diphtheria										11
Measles .										14
Whooping co	ugh									3
Other impo	rtar	nt di	ffere	ence	s we	re:				
Accidental ar	d vi	olent								5
Pneumonia										27
The princip	al i	ncre	ases	wer	e:					
Cancer .										15
Bronchitis										12
Diarrhea and	ente	eritis	(und	ler 2	year	's)				12
Other causes										15

There were 16 more deaths under 1 year, 32 less under 5 years, and 28 less over 60 years.

NUMBER OF CASES AND DEATHS FROM COMMUNICABLE DISEASES.

(Four Weeks Ending December 29, 1917.)

	Tomax	Ciona	Топит	Deaths.		SIDENTS	NTS.	
	TOTAL	CASES.	TOTAL	LIEATHS.	CAS	ses.	DEATHS.	
	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.
Diphtheria	501	220	25	14	37	55	3	2
Scarlet fever	146	112	3	3	18	38		2
Measles	317	84	14		7		2	
Typhoid fever	8	18	. 1	. 3		1		
Whooping cough	188	13	4	1				
Tuberculosis	186	142	85 82		10 14		.7	7

MORTALITY FOR THE FOUR WEEKS AND SAME PERIOD IN 1916.

							1917.	1916.
Total deaths							1961	908
Nonresidents							126	138
Rate		• .					16.22	15.57
Corrected rate (nonre	$sid\epsilon$	nts d	edu	eted)			14.09	13.20
Deaths under 1 year							140	124
Deaths under 2 years							171	150
Deaths under 5 years							206	174
Deaths over 60 years							305	277

CAUSES OF DEATH.

	CA	021	3 ()r i	JEA	111.			
								1917.	1916.
Anterior poliomyelitis								—	4
Cerebro-spinal meningit	tis							3	2
Diphtheria								25	14
Malaria									-
Malignant pustule								1	-
Measles								14	-
Scarlet fever								3	3
Tetanus								_	1
Tuberculosis (pulmonar	y)							85	82
Tuberculosis (other form	ms)							11	16
Typhoid fever								1	3
Whooping cough .								4	1
Accidental and violent								60	65
Heart disease, endocard								178	182
Pellagra								_	1
Bronchitis								14	2
Cancer								68	
Diarrhea and enteritis	(und	er 2	year	s)				19	7
Diarrhea and enteritis								7	4
Erysipelas								2	2
Meningitis and encepha								3	2
Old age									1
Pneumonia								118	145
Premature birth .								29	23
Puerperal diseases								14	13
Rheumatism								3	1
Influenza								3	
Other causes								296	281
								-	

The Following is a Summary of the Work Done by the Different Divisions in the Department for the Four Weeks Ending December 29, 1917.

CENTRAL DIVISION.

Prosecutio	ns au	thor	ized							٠.	S
Stable hea											9
Temporar	y stab	le pe	ermi	ts							2
Premises	ordere	d va	cate	d							7
Miscellan	eous o	rdera	3								8
Application	ns lyi	ng-ir	a hos	spital	s ap	prov	ed				2
Forcible r	emova	ls or	dere	d							3
Proposals											2
Appointm	ents										4
Conference											8
Leaves of	absen	ce g	rante	ed							2
Transfers											3
Hearings											2

Licenses — Permits.

Applications for paddlers' licens	00 000	WO TTO	d						5
Applications for peddlers' licens	es app	rove	u					٠	2
Licenses to peddle fruit and veg	etable	S	٠		•	•	•	٠	
Manicure — Massage Dump permits	•		٠	•	٠	٠	•	٠	8
Dump permits									8
Special permits Grease (licenses to remove renev									2
Grease (licenses to remove renev	wed)								70
Hen permits									15
Numbers assigned									7
Hen permits	onal)								2
Stable permits granted	, ,	•		Ċ			·	Ť	2
Stable permits granted Stable licenses issued		•					•	•	2
Stable licenses issued	•	•	٠	•	٠	٠	•	•	1
Sundry license Vehicles inspected and approved License revoked Undertaker appointed				•	٠	•	•	٠	
Vehicles inspected and approved	a		•	٠	•	•	•	٠	490
License revoked								٠	1
Undertaker appointed			. ,						1
Offensive trade licensed									1 -
MEDIO	CAL	DIVI	ISIC	N.					
Commu	ınicat	ole D) isea	ases.					
Number of visits by medical ins	necto	ra							977
				•	٠	٠	٠	•	17
Antitoxin given Deaths investigated Cases brought to Boston for tree	•	•	•	•		٠	•	٠	
Deaths investigated		. *	٠	•		•	•	•	13
Cases brought to Boston for tre	atmer	ıt							100
Vaccinations									74
Vaccination certificates					٠.				22
Antityphoid vaccine administer	ed								2
Forcible removals recommended	1 .								11
Public	Heal	th N	lurs	ing.					
Communicable disease visits .									3,640
Number of revisits (infants) .			•	•	•	•		•	
Number of new babies visited									
Number of new bables visited			٠	٠		•		٠	284
Total visits by nurses .									7.566
20002 120200 0.5 220200								·	,,,,,,,
BACTERIOLO	GICA	LL	ABO	ORA'	LOE	Y.			
F	D:		-1-	4	D - 1				
Examinations for	or Dia	agno	S15	and	Kei	ease.	•		
Diphtheria									2,876
Tuberculosis									297
									78
~ 1									418
Gonorrhea	•	٠	٠		٠	٠		•	551
Syphilis						٠	٠	٠	
1. B. Comp. Fix. 1est (special	examı	natio	ns)		•	٠			551
Other examinations *									115
Bacteriological milk examinatio	ns .								638
Other examinations * Bacteriological milk examinatio Bacteriological water examinati	ion								1
*E-mination of water 52. Capita III	in o myr 1	Tubon	aulaa	in 7. 1	Onht	halmi	. 40:	Mo	louis 2

^{*}Examination of rats, 53; Genito-Urinary Tuberculosis, 7; Ophthalmia, 40; Malaria, 3; Paratyphoid, 2; Glands for T. B., 1; K. L. Vir., 4, Ascitic fluid, 1; Miscellaneous, 5.

FOOD INSPECTION.

Live Stock Inspected at Brighton Abattoir.	
Cattle inspected	950
	2,159
Sheep inspected	2
Swine inspected	3,771
Animals condemned, whole	7
Parts condemned	371
Stores inspected	514
MILK INSPECTION.	
(Examinations as to Statute Requirements.)	
Samples examined:	
	1,270
	638
	82
	107
	16 5
Fines	\$2 35
Inspection of Provisions — Articles Condemned.	
Meat and Fish: Miscellaneous:	
Lamb 148 nounds Nuts 1 no	in d
Lamb	
Turkey	unda
Pouls 170 pounds Tomato posts 1670 ou	unds
Pork 178 pounds Tomato paste . 1,679 car	unds
Beef 35 pounds	unds
Beef 35 pounds Eggs 8 dozen	unds
Beef 35 pounds	unds as
Beef 35 pounds Eggs 8 dozen	unds
Beef 35 pounds Eggs 8 dozen	unds ns
Beef	
Beef	3 ,2 18
Beef	3,218 338
Beef	3, 2 18 338 353
Beef	3,218 338 353 5,545
Beef	3, 2 18 338 353 5,545 3,814
Beef	3, 2 18 338 353 5,5 4 5
Beef . 35 pounds Eggs . 8 dozen Oysters . 10 gallons SANITARY INSPECTION. New reports	3, 2 18 338 353 5,545 3,814
Beef	3,218 338 353 5,545 3,814 848
Beef	3,218 338 353 5,545 3,814 848 1916. 2,769 1,797 2,055
Beef	33,218 338 353 5,545 3,814 848 1916. 2,769 1,797 2,055 1,631
SANITARY INSPECTION. SANITARY INSPECTION.	33,218 338 353 55,545 3,814 848 1916. 2,769 1,797 2,055 1,631 868
SANITARY INSPECTION. SANITARY INSPECTION.	3,218 338 353 5,545 3,814 848 1916. 2,769 1,797 2,055 1,631

DEATHS FROM COMMUNICABLE DISEASES. (1917.)

					1917.	1916.	Non- residents.
Diphtheria					276	185	72
Scarlet fever					46	39	14
Measles					101	107	13
Typhoid fever					22	2 6	5
Whooping cough						75	. 3
Tuberculosis (Pulmonary	r) ·	۰	• 1		1,155	- 1,112	105

CASES OF COMMUNICABLE DISEASES REPORTED.

				1917. Non-							
									1917.	1916.	residents.
Diphtheria						1,0			4,098	2,409	587
Scarlet fever				٠					1,497	1,766	. 314
Measles .								٠	5,695	5,324	56
Typhoid feve							٠.	•	201	185	25
Whooping co									931	1,393	12
Tuberculosis	(Pul	lmor	nary)		•	• 1		• .	2,796	2,256	246

MONTHLY METEOROLOGICAL SUMMARY, DECEMBER.

ATMOSPHERIC PRESSURE.

(Reduced to sea level; inches and hundredths.)

Mean, 30.18; highest, 30.84; date, 17; lowest, 29.11; date, 14.

TEMPERATURE.

Highest, 48; date, 9; lowest, —14; date, 30; greatest daily range, 35; date, 8; least daily range, 7; date, 19; normal for month, 31.62°.

PRECIPITATION.

Total this month, 2.56; snowfall, 7.0; greatest precipitation in 24 hours, 1.19; date, 1; snow on the ground at end of month, 0.3; normal for this month, 3.41.

WIND.

Prevailing direction, northwest; total movement, 9,148 miles; average hourly velocity, 12.3; maximum velocity (for five minutes), 48 miles per hour from east, on 8th.

WEATHER.

Number of days clear, 6; partly cloudy, 8; cloudy, 17; on which .01 inch or more of precipitation occurred, 12.

MISCELLANEOUS PHENOMENA (Dates of).

Auroras, 0; halos: solar, 8, 12, 16; lunar, 25, 26; hail, 8; sleet, 8; fog, 0; thunderstorm, 0; frost: light, —; heavy, —; killing, —.



